An Address
ON
SOME OF THE LIMITATIONS OF MEDICINE.

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GENTLEMEN,—In Mr. Leslie Stephen's life of his brother, Sir James Fitzjames Stephen, there occurs this passage with reference to the choosing a profession by his distinguished lawyer brother: "He therefore begins in the most prosaic fashion by an attempt to estimate the pecuniary and social advantages of the different courses open to him. These are in reality the Church and the Bar, although, by way of exhibiting the openness of his mind, he adds a more perfunctory discussion of the merits of the medical profession. Upon this his uncle Henry Venn had made a sufficient comment. 'There is a providential obstacle,' he said, 'to your becoming a doctor, you have not humbug enough.'" Now that was, of course, some forty years ago, and there are those who may think that the medical man of to-day is not the man of that long gone time. Nor is he. It would, indeed, be a sad day for all of us if, with all our immense additions to knowledge, the world had no better medical men now. But I should not be disposed to let even our ancestral worthies rest under any such offensive imputation. They acted in their day quite as much up to their lights as we do now. But I take it that, in passing it on, the writer of the memoir from which I have quoted has in some measure made the present day responsible for a similar impression, and I am afraid it is true that a good section of the general public—and even, I fear, it must be confessed, not always the least discriminating—has floating about in its mind, and sometimes lets escape in veiled speech, that a medical practitioner must be more or less of a humbug. It is very interesting in looking over our weekly *Punch* to see how sometimes the artist misses true humour by being too absolutely real. This is so with the "Old Millionaire" of Oct. 12th. What could be more pathetic than that very old man with his "no expectations"? But it is no caricature. The same may be said of the medical man of good bedside manner and small acquirements of a few years ago. It, too, was painfully real, with a double edge, for it cut both at the public and at the supply which in some small measure its demand has created. It is a good illustration of my text. I have thought it, therefore, not inappropriate to our meeting to-day to discuss one or two of the conditions under which we are obliged to practise that seem to me to conduce to such an erroneous notion. And it seems to me that the explanation is to be found first and chiefly in the uncertainties of medicine; next, perhaps, in the impossibilities—the forlorn hopes—we are so constantly being called upon to deal with and to lead; and, thirdly, I would add, in some degree with our manner of dealing with such limitations as these under which we labour. Now the uncertainties of our work are so many and so manifest that it might, indeed, seem quite unnecessary to mention them; but I shall tax your patience by a few of them, and they shall be some of the commonest, though perhaps not too well known for all that.

Let us take the matter of diagnosis first. How great is often the practical difficulty of coming to a conclusion upon the real state of a particular person's lungs. There are those who may, perhaps, think that the existence, say, of cavities in the lungs can be determined with ease—and I do not say that it is not so for many cavities; but we all know that a large cavity may exist in the lung without giving any signs of its presence, provided that it be surrounded by healthy lung tissue or that the bronchus by which it communicates its physical signs be blocked. It may not, perhaps, have occurred to all of you to observe, on the other hand, how a very small cavity, provided that it be near the surface and surrounded by condensed lung, may give all the physical signs of a large cavity, a point of the greatest importance now that surgical procedures have added so largely to the resources at our disposal for the treatment of diseases of the viscera. And I take it that in this fact is to be found the explanation of another fact, also an illustration of my present contention—viz., that it is by no means uncommon to obtain the physical signs of a cavity in cases where the lung is only consolidated in acute pneumonia. Take another case. It is practically impossible in many cases to speak positively as to the existence of early phthisis. Many a patient has been said to have had phthisis, and, perhaps, has spent winters abroad in consequence, who has never had anything of that sort the matter with him; while many another on the brink of a galloping tuberculosis has been pronounced sound by equally competent authorities. Then take the heart; and how uncertain often are the signs of grave muscular weakness, so that a really experienced man shall say one day that there is nothing the matter and the next day sudden death takes place. I may even take up a more extreme position and say how uncertain often are the evidences of enlargement of the heart. We are all hearing now of what the general public is pleased to call the new treatment of heart disease, the treatment by mechanical exercises and so forth. I cannot now discuss the value of it. It has its value undoubtedly in selected cases; but I want to say that any support it may derive from the varying amount of præcordial dulness before and after the exercises is of a very unreliable description. We all know that in the post-mortem room the largest hearts are often found unsuspected, and that even under very competent hands a large heart sometimes becomes, under the rigid presentation of the dead-house, a very large heart indeed. Emphysematous lungs are a great hindrance to the detection of large hearts, and for the same reason—the greater expansion of the lung under the exercise—no observation upon the præcordial dulness before and after exercise is of much value. I may note two other points concerned with the same difficulty. I allude to the doubt that there often is about estimates of the amount of fluid in the pleura. One can, perhaps, generally say that there is fluid in the chest, but often and often one cannot get any idea from the physical signs how much there really is. The diagnosis of pericardial effusion labours under the same disabilities. To be certain of even considerable effusion in this sac is often a matter of the greatest difficulty, not to say impossibility; and I think I may say that I have had a rather exceptional experience of such cases. Here, again, the post-mortem room tells that many a pericardial effusion has descended to that department unrecognised, and, on the other hand, that sometimes an effusion suspected, or even diagnosed, is not found. I have seen a pericardial sac cut down upon as being full of fluid, after the most careful examination, only to be found dry. In the abdomen, again, appendicular colic seems to have added a new terror to diagnosis by necessitating a still further differentiation of colics. It was bad enough sometimes to have to decide between nephritic and hepatic colic, between neuralgia of the kidney—if there be such a thing—and simple colic. And, by-the-bye, in passing, is there such a thing as a simple colic agony, for by such a term only can I explain my meaning? Is one ever justified in attributing to simple spasmodic intestinal pain any attack so severe as to induce vomiting? Are not these the signs of calculus, or peritonitis, or twists, or something dreadful? I think that unbearable pain from simple intestinal muscular action is rare, although it may well seem somewhat inconsistent to allow its existence for such an insignificant little canal as the appendix cæci and to doubt it in the case of the bowels proper. But, perhaps, it is the very insignificance of the appendix that constitutes its sting. Even the worm will turn. That a pure appendicular colic—that is, colic due to disease in the appendix cæci in association with retained mucus—will occur without the existence of any inflammation of the peritoneum I have indisputable proof, but no doubt I ought to ask pardon of the surgical section of my audience for putting forward so elementary an assertion. But for us poor physicians I would again insist that its existence has added a new terror to life for the medical man as well as his patient. And if one turns from the uncertainties caused in diagnosis by what might, indeed, seem straight sailing conditions, what are we to say of those countless questions that obtrude themselves upon our attention when we have to decide between the many ill-adjusted balances of physiological relation—between such states of ill-health and their differences as are caused, say, by one organ failing to do its proper share of work and where other organs are called upon

to do the more, of which perhaps the hypothesis of renal inadequacy may serve to clear my meaning? Such hidden meanings must result in perplexed purpose, and perplexed purpose is the opportunity of chance.

It is still worse when we come to grapple with the uncertainties, not of diagnosis, but of treatment; because here in still greater force comes out the individuality of man. What does this not mean when you come to champion health and pit yourself against his many maladies. This living machine (we call it a machine, and perhaps it will be in the future) is in truth a great coöperation where each department differs greatly, one factory from another, in intuitive ease of working, in capacity for work, as well as in methods of working. We are for ever assuming—perhaps we are obliged to assume—that our bases of operation are constant; whereas the very opposite is the fact, and much of our uncertainty comes from the patient and not from his disease. There are those who go through life without a day's illness, and there are those who seem to "catch," as it is called, every thing that is going. There are those whose every cut turns to a sore—though I daresay the surgeon turns aside to whisper, "Yes, if not properly treated"—and there are others whose perhaps serious wound never looks back in the process of repair. There are those whose stomachs think no evil of assafœtida, and others to whom the most delicately prepared pill of a simple drug acts as a poison. There are those again to whom climate seems to be the main obstacle to at any rate pleasurable existence, and others who can go anywhere, do anything, and never turn a hair. Yet all these varied existences have to be treated, and treated for diseases that have the same names in the one and in the other, and treated by the same drugs, more or less, that are allocated to each disease. To prescribe for a headache may be an easy thing, albeit not always very successful; but to prescribe for John's headache, and Thomas's headache, are different things. "There are at least six personalities distinctly to be recognised as taking part in a dialogue between John and Thomas," says the Autocrat of the Breakfast Table. You know them: "The real John, known only to his Maker," who is not his physician unfortunately. It is, indeed, too sadly true for applied physic that the medical man's patient is never the real John, or John's John, but often very unlike either. We, indeed, know nothing of the details that produce individuality—one might almost fear that we never can know, forged as we are in the past and moulded by the present, constantly adapting ourselves to changing circumstances. To attempt to control disease as modified by such unstable conditions might well seem hopeless—an attempt to reorganise and reform a complex system that is the growth of years: a task meet, indeed, for the reformer who is blind to disaster even in the wreck of revolution, but not for the thoughtful mind, not for the balanced judgment, not for us. Happily, things are not so uncertain as they might seem, and day by day they become a little less so, but for the present, and for long, it must still be that we know much less than we do not know. And this ought to be made as clear to the mind untrained to medicine as to us.

Of the impossibilities of medicine—and although it will have been apparent that medicine has been used to include all branches I will yet specially here note the fact—I will take only one, the greatest of all: the attempt to cure the incurable. That is what we are constantly being asked to do. I have known a man come to town and visit five or six surgeons, one after the other, in a morning to get rid, if it were possible, of the terrible incubus of a diagnosis of cancer of the tongue. An intense love of life is in the immense majority of the human species a part of the fact of the possession of it. Only a very painful disease or an exhaustion of such nervous centres as appreciate the happiness of living can crush it out. The medical man possesses it himself equally with his patient. Is he to crush it out? He could not if he would. Death is inconceivable to those who still climb upwards on the hill of life. The reality of death comes only as the physical fact comes—slowly. No man not past his work can know of a readiness to die. Rather is it that he can see no reason save the awkward one of fact why men do not live on for ever. Thus beaten—sadly beaten, as he too often is—the medical man rises from the ashes of defeat untaught, unteachable: indomitable still, instinct as is the sick one with the potentialities of life. And it is this one great living instinct of hope that underlies all the difficulties of medicine and—God forgive them—that leads the undiscerning to think that the medical man must be a humbug. Knowing more than they, we can readily allow that it is this great unconquerable attribute of life that does indeed seem to place us sometimes in equivocal circumstances. Let us look a little into this. In the first place, and because of it, medical men are believed systematically to suppress the truth; and in the second place—this is a criticism that comes from within us—in our eagerness to do our best for our patients and to cure or ameliorate the results of disease we no doubt sometimes err—for my own part I shall say often err—by the over-treatment of disease or of symptoms.

And, first, as to the systematic disguise of the truth. The common complaint of the man in the street is generally this (I borrow from a letter addressed not long ago to one of the medical papers by "a patient"): "If," says this person, "a patient is content to accept his doctor's prescription without inquiring too closely into his opinion of the nature of the case, I do not think it is incumbent on the doctor to reveal in all cases his suspicions of grave danger. But where a patient is clamouring to know what is the matter with him, it is too often the doctor's habit to return not only evasive but misleading replies, and I am strongly of opinion that the suspense and anxiety which result from this practice are frequently more injurious than the knowledge of the truth would be." "If," the writer says further on in his letter, "the impression that doctors habitually deceive their patients for their patients' good were once removed I am certain that the general esteem in which doctors are held would be greatly increased." This is, of course, only an opinion, and I cannot think that it is worth much because the writer talks of a rule of the profession not to take the patient into confidence in serious cases. I know of no such rule. Each case is decided on its own merits, and if such separate decisions in the gross have resulted in a practice of this kind it must be because medical men have seen reasons for concluding that it is on the whole the one most conducive to the welfare of the majority of minds. I do not claim for ourselves that we are better than any other body of men, but we are not worse, and if, for the sake of argument, we do habitually tell lies, the very disinterestedness of our damnation may well be considered as very strong evidence of the necessity that we think to be laid upon us. Medical men, unfortunately, know more of the natural man than does the patient quoted. They know that there are three classes of patients, if not more. There are those who really want to know all that we can tell them—the *very* truth. I put this group first in deference to the view of the "patient" I am combating, but it is, in my opinion, a very small group indeed. These generally succeed in making it quite clear that they really are in earnest in their request, and, in my experience, the absolute naked truth is told them. Then there are those who, having asked for the truth, did not really know their own minds; they only wanted favourable truth, and when it turns out unfavourable they seek an opportunity to go away from Dr. A—— to Dr. B——, because, say they, Dr. A—— is so abrupt, or so desponding or depressing, or always takes the worst view of his cases. In another still larger group of cases the question is never faced at all. They may have grave fears about the gravity of their malady and they unconsciously minimise their symptoms. They may brood over and fear the worst, but they never ask for an opinion, they never even mention their suspicions or fears themselves; these leak out perhaps by the sigh of relief that results from a cheery verdict or from the furtive aside of an accompanying friend. I venture, therefore, to state, as the result of deliberate and experienced conviction, that just as it is those who have little the matter with them who go about in fear of death—not those whose days are really numbered—so those who are not stricken with mortal illness are clamorous to know the truth, and those who are mortally wounded in the battle of life seldom seem to have any desire to know. The desire that they should know comes usually from the bystanders and concerns itself with the great question, "What next?" That "Won't you tell him?" when the physician gives an adverse verdict implies that most beautiful and most poetic, but most unreal, idea that man passes over the confines of Time and enters the Land of the Future with all his faculties vivid and intense in transit. But is it so?

> "And may there be no moaning of the bar
> When I put out to sea"

is very beautiful, but it is not applicable to the mass of

mankind. Death seldom comes to man till his intellectual faculties are incapable of appreciating that passage of the bar. Thus there is nothing terrible to the dying in death itself. The veil between two worlds is but a cloud, and one passes through it imperceptibly.

If we except, then, such as have not arranged their affairs where it is of real importance for those who are to be left behind that this should be done, and those who, wanting to know everything, are granted their wish, I shall admit that for the large majority of the remainder, not that the truth is systematically disguised, but that the worst points in a case are kept in the background, and that the more promising ones are made the most of. I am prepared to justify this practice as not only the most humane, but as the best thing to do in the interest of the prolongation of the life at stake. And first of all, What is truth? As I write this I have come from the bedside of an old lady aged eighty-four years, stricken with acute pneumonia at the apex of one lung. She said as I was leaving her, "I know you won't deceive me; if I am going to die you will tell me the truth." Was I to say, would it have been right to say, "At your great age you are nearly certain to die"? That would have been the truth, and no more than the truth, for such a case, and would have been exactly what I thought. But truth can be brutal as well as kind. Was it not more humane to tell her that she was very ill but going on exceptionally well, which was the truth disguised or presented with "tact" or however you like to express it? Who can doubt that the right thing to do was to leave the patient with the life-sustaining hope, a hope that I certainly shared, although hardly daring to expect to see it realised? Well, then, how often in a single experience does it happen to a man to be able to say, while his patient is in a condition to be able to take advantage of it, "you have only got so long to live." In this very case I have mentioned the patient has recovered from her pneumonia, although the ultimate issue at such an age must still be very doubtful. Over and over again a patient has been given up by his medical attendants only to return to healthy life, and not uncommonly to make a life-long laughing-stock of those who have condemned him. Years ago, when resident house physician at Guy's Hospital, I arranged with the sisters in the medical wards that I should be called to every case that seemed to be dying. I wanted, apart from my duties, to obtain also some actual knowledge of facts that foretell immediate dissolution. It was a painful and depressing ordeal, and having gone through it I cannot say I am better informed now than I was before. I still find it as impossible as ever it was to get behind that impassable barrier of Providence,—The day and the hour knoweth no man.

I have chosen this, the most vital, question upon which to defend our freedom of judgment as to how we shall present our opinions to individual patients, because this is the one where our wisdom is most commonly called in question. But there are numberless other circumstances in which, if we would do the best we can for those who consult us, we cannot always say exactly what we think. We may, for example, think that a certain individual drinks too much. It is seldom advisable to blurt out, "You drink." At least, if one did it is more than probable that all chance of influencing the patient for good would be sacrificed, and that much obloquy and even personal loss would result to the medical man, for such people as this will talk and are not usually particular about strict veracity. So what is called "tact" is necessary, and tact is a vehicle to disguise the real taste of the truth. Thus careful inquiries about the daily diet of the patient are gradually worked off the meats on to the drinks of the ailing one, and the amount of claret taken daily. Of course, he or she never takes anything stronger. Thus is obtained an opening upon which to discourse upon the hostility of alcohol to some constitutions, and to this one in very particular. There are any number of times when one is equally unable to put things as bluntly as might for some reasons be desirable. For instance, to tell a lady that she is hysterical is equivalent to asking her to attend the practice of your most hated rival. Also, if you want to keep your patients you must not say they are nervous. This I know from experience. You may say they are highly strung I conclude, therefore, that to tell brutal truths to patients is on several accounts mostly impossible, and I fail to see why we are dubbed untruthful on account of such inability.

In the matter of the over-treatment of disease, although it comes from the best of motives, perhaps hardly such intelligible reasons can be given for its occurrence. But in the first place I must say what I mean by over-treatment, and I will do this by appealing to current thought. No doubt you have all seen a correspondence initiated by an address given at the British Medical Association by Sir William Priestley upon Over-operating in Gynæcology. Sir William Priestley has been much taken to task by some of our surgical *confrères* from what, it seems to me, is a very narrow point of view, in that it has been made a class question of the physician, who is jealous at the success of a surgical coöperator. But I venture to say that the question must be considered from a much wider standpoint. It is not for anyone of us to play the part of the saucepan calling the kettle black, and I do not propose to confine my criticisms to any one branch of practice. Looked at from this broader aspect by the dispassionate watcher of the tide of progress, there is surely much that is wise, nothing that is not true, so far as I can see, in Sir William Priestley's address. And I will take medicine first and point my argument by illustrations. There came into my room the other day two brothers in the prime of life. They looked healthy, and they were healthy, but they complained of indigestion. You all know how much or how little that may mean. They both had the same tale to tell. They were full of gout, so their medical adviser said, and they had been taking the waters to drive it out. I went into their habits and their history with the greatest care, fully determined to find out anything that there might be that was treatable; and I am sure that if anyone could look at those two young men, apart from the bias engendered by the continual treatment of disease, he would say, as I do, that they are specimens of perfect health. This seems to me a good illustration of over-treatment, and is an example which, *mutatis mutandis*, will apply to a good many cases that we all meet with—men and women who will have medicine although they do not want any so far as their bodily condition is concerned. Let me give one more common case—that of the lady who, being wealthy, has had plenty of time to pay undue attention to her varied sensations. Say that there is something rather crocky about her family history, and this has made her unduly anxious about her lungs. She therefore consults many medical men, and perhaps one or another suggests the possibility of the presence of tubercle. She is seldom long without a medical man afterwards; she goes here and there and everywhere in search of health, and it is doubtful whether she has ever been tuberculous at all. And as this leads me to the subject of tuberculosis it will do as well as any other disease to illustrate the point under consideration.

I cannot but think that there is great danger of our letting the facts run away with us as regards the exact importance of the bacillary origin of tuberculosis. Once phthisis is shown to be infective, it is by many at once assumed that infection is infection, always the same, and to be dealt with always in the same manner. I have elsewhere treated of this matter,[1] but as the present occasion affords me the opportunity, as it were, of crying aloud upon the housetop I will say again that if anything is sure in the history of tuberculosis this is that the infecting agent is *not* a virulent one and is in many respects quite peculiar in its methods of invasion. Years ago, in making experiments upon rabbits and guinea-pigs upon the production of artificial tuberculosis, I found, as Wilson Fox had found before me, that the nature of the injury to the animal was comparatively immaterial. Tuberculosis was induced whether the primary lesion was the insertion of tubercle itself or the introduction of bits of cloth, of setons, and so on. Any chronic irritant appeared equal to producing it, and the disease was explained in those days as a matter of lymphatic hyperplasia, of infection from cell to cell, one cell imparting its morbid activity to another—a form of activity that has been banished from the pathology of the present day, but one which, I take the liberty of thinking, will some day become rehabilitated in the esteem of pathologists, when the bacterial boom shall have receded to its just proportions. But other observers followed, of whom one of the first, if not the first, was Dr. Dawson Williams, who showed that if the experiments were carefully conducted, and all the instruments carefully sterilised, no tuberculosis resulted save where tubercle had first been inoculated. It has been assumed from experiments such as these that the primary essential is, therefore, the introduction of the tubercle bacillus, and the other changes are the result of its introduction. But I have always

[1] Medical Magazine, 1894.

thought that a rider to this is also possible; for in the first place it might well seem a little strange that out of a very large number of experiments so many non-tuberculous lesions should yet become inoculated with such regularity, whereas there was an important difference in the mode of operating in that the conditions resulting were just those to reduce the local inflammation to its lowest possible degree. Therefore, it may have been that in avoiding local inflammation a large part of the risk of the introduction of tubercle was also avoided. There are many facts in the history of tuberculosis that show that this is really so. A case in point readily comes to my mind. In the spring of the present year I was asked to see a young man who, in previous good health, had about the end of an influenza epidemic come home one evening, had a rigor, and from that time forward was feverish. After about ten days a friend of mine who was attending him asked me to see him because the fever was continuing, and no cause could be discovered. Just at that time a small patch of pneumonia began to show itself at the lower part of the right lung, and I said that no doubt the man had had influenza, and out of it had come a slowly developing pneumonia, as is not uncommon, and that now things would go on aright. There was, I think, something against the patient's family history, and I was therefore pushed as regards the possibility of the disease being tuberculous. But I said, "No." The disease did not begin like a case of tubercle; the initial rigors were much more like a pneumonia; the apices of the lungs were perfectly sound, and he would do all right. The case went on as one expected for some days; the whole of the right base solidified, and when we met again two or three weeks later the whole of the lower lobe was absolutely solid, the apex remaining quite healthy. But now time was getting on and the temperature was regularly up to about 102° F. every night, and again I had to defend my position that the case was not one of phthisis. I still refused to admit that the case was tuberculous. We now had the sputum examined, and on two occasions it was found free from bacilli, and I still stuck to my guns. But time ran on still further, and after six or eight weeks the lung showed no sign of resolving, or the temperature of abating; and now the sputum, when examined, showed a few bacilli, and later the bacilli became fairly numerous. What was I to say now? Many would say it has been an unusual case of phthisis, beginning at the base of the lung. It may be so; but for my own part I think the proper explanation of such a case is such as I have contended for in the tuberculosis produced in rabbits by setons and so forth, and that the pneumonia has let in the tuberculous germs, and that in this way the case becomes one of secondary tuberculosis. I give this case because it is an unusual and an interesting one, but there are any number of parallel cases; and I take it that the practice of the future, not perhaps the near future, will be a rebound to the teaching of a bygone day, not a struggle with countless hosts of invisible enemies, a struggle that might well seem hopeless did we stop to think about it, but, with increasing powers of securing health, a recognition of the fact that by keeping people healthy these microbic armies lose their terrors.

This is not to say that we need not avail ourselves of the precautions inculcated by our present-day knowledge of bacteriology. That would, indeed, be folly. It is to say that our precautions are to follow our knowledge and not to run in advance of it. And this is a distinction very necessary in the matter of tuberculosis. What are the facts as regards phthisis? There is no mistaking the drift of opinion. We are beginning to regard this disease as we do any other of the infectious diseases, totally different as most of them are in natural history. We are now taught that phthisis can be caught, and isolation is being preached as the right thing if it could be accomplished. Notification also has the same half-suppressed advocacy, and after it, or with it, comes the disinfection of houses in which the tuberculous have lived. I saw a case of phthisis the other day, and he left me to go and stay with his sister. Within a post or two this lady wrote to me to know what I thought of infection, because she had young children and she was herself delicate. I am often getting such letters.

Let us ask ourselves what we really know as to the value of disinfecting houses that have been inhabited by the tuberculous. I know nothing, but I dreamed not long ago that from some coign of 'vantage I beheld a stronghold of bacilli grown big and visible in the illusions of the night assaulted by the sanitary inspector with his sulphur and his lime, and as the fumes arose these bloated midges giggled to themselves at the pleasure they derived from the unusual perfume. But by-and-bye Messrs. Soap and Water came upon the scene, the windows were opened and the winds of heaven let in, and then it was that they turned tail and fled. Harassing precautions are all very well when we know that they will accomplish the end in view; but in the case of the tubercular bacillus we have no such knowledge, and for the present we had much better content ourselves with insisting upon absolute cleanliness and plenty of ventilation. We shall be in accord with, but not in advance of, our knowledge, and we shall have a much better chance of having our orders attended to. I should think there is nothing more sure in medicine than that the tubercle bacillus has special attributes, that it is not easily caught, and that it is successfully dealt with by common-sense precautions without turning society upside down. One other point with reference to this same disease. Do you not think we overdo the extradition of phthisis? It may be, and is, all very well and advisable that people who have plenty of money, and who can obtain every luxury, should travel for their health. They can carry home with them in a measure, and at the end of the voyage, as at the beginning, they have only to please themselves. But I am seeing every few days almost some poor clerk or shopman, or governess may be, who has been advised to go abroad for a weak chest. "And what," I ask, "are you going to do when you get there?" "Oh! look out for some work," is the reply. "Do you know anything of the country?" "No." "Have you any friends who can help you?" "No." "You are going by yourself?" "Yes." Thus they would go to a strange land without knowing a soul, and in search of clerical work, where workers of that sort who are strong are at a discount, and mostly are spending the small sum of capital saved or raised because they or their friends want to do the very best for them. And too often it is the very worst for them.

Aneurysm of the arch of the aorta is another malady that is, I think, too often over-treated. But it is a disease so desperate that one may be excused for making somewhat frantic efforts to save the life of the patient. I would, however, insist that we do not know the natural duration of any aneurysm. We know that they are practically incurable and that many last a long time—three, four, five, or even seven years—if under favouring circumstances. It is my belief that a very rigorous treatment in the way of dieting and prolonged rest in bed is a dangerous one unless directed with great judgment. It eases some symptoms, and in a solitary case now and again it has been said to cure. But I doubt if the good results are any set-off to the harm that is done by its routine application. The best that can be done, in my opinion, for an aneurysm of the arch of the aorta at present is to look upon it as incurable by any means; to, therefore, allow gentle exercise, with occasional rests in bed if pain be severe or there be signs of rapid increase of the aneurysm; an ample diet of good blood-making food, including fats, which the late Dr. Wooldridge showed by experiments to have some power in increasing the coagulable quality of the blood; reducing as far as practicable, without destroying the comfort of the patient, the amount of fluid taken in the twenty-four hours, and giving such drugs as are suitable to the case. Anything further than this—and cases are often treated much more rigorously—is what I should call over-treatment.

With some trepidation, too, I am inclined to say that a very different disease is made more of than its importance deserves, and that is ringworm. I never now attempt to treat it; I send it on to the dermatologist. I cannot cure it, and very often he cannot. And sooner or later it is taken out of his hands, and either left alone or treated by the herbalist with ink or Condy's fluid, who then, having made to himself friends of the mammon of unrighteousness as far as he deems judicious, calls it cured, and thenceforth the child is let loose again upon society. I often wonder when I hear of a child with ringworm of a year's, or perhaps two years', standing, and, of course, kept out of school and away from his companions all that time, what would have happened to his associates equivalent to the harm that has accrued to the child and his attendants from the treatment that he has undergone. Honestly I should very much like to see the parable of the tares and the wheat applied to this disease under scientific observation. To start with, no doubt, the sheep and the goats—I mean myself and the dermatologist; no, I beg pardon, the dermatologist and I—should differ as to the prospects of the

harvest, *I* not expecting in the end to have much of the tares to deal with, *he* not much of a field of wheat. Anyhow, I am quite sure of this—that we should hear much less about ringworm—whether for the good or evil of the community I will not attempt to decide—if mothers had not got it into their heads, quite erroneously, that it is a dirty disease. Not long ago I was seeing a baby that had scurvy rickets, and the father was bemoaning the hardness of his luck, that, whereas he had always considered his family as a particularly clean one, one child had recently had ringworm and now another had got scurvy.

This is a very fair confession for me as a physician. Very shortly let me turn my attentions to surgery, and first I will say that I have often of late years asked myself the question whether we do not make too much of lateral curvature of the spine. Did anyone ever yet see a slight curve go on into a very bad one? It seems a rational assumption enough that it is so. But are we sure that it is so. It is mostly a disease of girls, and mothers quickly get into a panic if a shoulder is supposed to be growing out, and then we advise what is now the proper treatment, a prolonged course of the most irksome exercises. Now do not let anyone who is interested in this or any other subject I have treated think I am wishing to speak *ex cathedrâ*. I come before you in all these questions I have raised an honest doubter wanting to know if such ideas as have occurred to me have not also presented themselves to you. I see something of these cases, as do you, under different circumstances and at other times, odd times, than those at which the specialist sees them. And I incline to think that slight spinal curvatures, which form the staple of the successes in treatment, are a distinct class of cases from the bad cases. If not, then I should conclude that an incurable, I will not say an irremediable, condition is very quickly reached—at least, very many seem to be told they should have come before, and that they are bad cases and can only be prevented now from getting worse. Then surely there are some lateral curvatures that advance in spite of the best treatment. All things considered, then, I would venture to ask whether we should content ourselves with the groove in which we are now running—that the slightest lateral curve discovered, the sufferer must at once go in for a long course of specially adapted exercises. No doubt this plan is both more physiological and more rational than the now mostly discarded one of instruments and supports, but it does not seem to me that the results of even this method of treatment are quite so satisfactory as its advocates would have us believe. And I am not quite satisfied that we do not make too much fuss over these cases, and that the dirty ones would do just as well by turning them out to grass and insisting upon healthy, enjoyable exercise in healthy surroundings, combined with plenty of rest. Flatfoot is another condition the exact importance of which it is difficult to appraise. There are hundreds of people going about with flat feet and not in the least inconvenienced thereby. It is only in the small proportion of these cases that there are pain and so forth. So that it would seem that the trouble is more in the individual than in the shape of the foot; and I incline to think that we sometimes make too much of the foot and too little of the individual who owns it.

I will only mention one more affection, and that the disease of late years called adenoid vegetations of the nasopharynx. Again, do not let anyone misunderstand me—I am not belittling the enormous amount of good that has come to humanity by the recent methods of dealing with these growths. I should think ear disease and tuberculosis starting in the neck and stunted development have been reduced enormously by the surgical treatment of these growths. But I do think, from what I have seen, that they are tending to become the red rag to the bull. I have in the course of the last few years seen children where the removal of these growths has been advised and where there was not one single symptom of their presence. They were there, but they caused no symptoms. He would do a good piece of work, in my opinion, who would make observations upon the proportion of children in our large towns who have this condition. I am inclined to think three-fourths of all would be no great over-statement of the number affected. At any rate, they exist in a large number of children without any symptoms, and I cannot think that it is wise to interfere in the absence either of deafness, or of enlargement of glands, or of a contracting chest, and so on. A lady came to me one day some time ago about her daughter. It appeared that not long before her small son had had adenoids, and as it was necessary to remove these the medical men thought they had better circumcise him at the same time, and no doubt it was a wise and proper proceeding. But the way it came to the mother's vision was that he had been "trimmed up all round," as she expressed it, and she came to me to protect her daughter from a similar fate. And that recalls to mind that the other day an American lady came to me with a child, and when she was seated she opened the ball by asking, "Have you a disease that is called appendicitis over here?" I replied that I had heard of it. "Well," she said, "where I come from they don't think anything of you unless you have had at least two cases in the family." So that it appears that over the water also our surgical brothers suffer, as we do, from a most unreasonable prejudice against the use of the knife! It is my belief, then, that in all branches of our professional work excess of zeal in treatment does occur. But, inasmuch as it is the necessary consequence of that enthusiasm without which no such responsible work could make any real progress, I do not think it can be altogether avoided. But let each of us see to this.

And here I must stop. It is not my purpose to point the moral to what I have said—I do not, indeed, know that it can be pointed; for, however it has been treated, my subject opens up large questions and great issues both to the medical man and his patient. And it is in this dual relationship that the difficulties occur; for mostly it is that our difficulties and errors of action are not those of our own making—they are forced upon us by those to whose service we have committed ourselves. But I think that we should all probably agree that we should find ourselves less often in troublesome corners if we more often kept the upper hand in dealing with our patients. The patient leads us in all manner of directions where we ought to lead him. For instance, he seems to me to have come to look upon a medical man as the repository of all knowledge, so that anyone who happens to say "I don't know" is looked upon as an ignoramus. Our patients need to be more constantly taught that doubt is no evidence of ignorance. One of the good things said by the late Sir William Gull is thus reported. He was attending a scion of nobility with one or two other medical celebrities of the time, and allowing their doubts to appear his lordship said: "Well, gentlemen, *you* don't seem to know what is the matter with the patient; is there anyone else that can give us more information?" "Yes, my lord," said Sir William Gull, with his usual readiness, "plenty if they are ignorant enough." I am constantly told that I must give some name to a doubtful case. I object altogether to give names to diseases that have not declared themselves, and I think that the friends of the sick, and the sick themselves where possible, ought to be educated on all possible occasions up to the understanding that there are diseases that no drugs can cure; that there are diseases that get well without drugs; that there constantly crop up sets of symptoms that admit of several different interpretations, and that hesitation and doubt may be as sure a measure of knowledge as decision. I think, too, that the time has come when, unintelligent as the layman seems to be in matters pertaining to his health, a resolute effort should be made to induce people to think for themselves. Can the practice of medicine be in a really sound state when we have to tell Mr. Dick, Mrs. Tom, and even, as I have several times known, adolescent Harry, that they may eat mutton but never touch beef, that they must not touch potatoes, and that they may have a warm bath at night, but not a cold one in the morning? There are few things less hopeful of the future of medicine than that at this the end of the nineteenth century it still seems necessary to treat grown up men and women as if they were children, and, what is worse, to find that dispensing leading strings finds much acceptance. You all know very well how the natural man curls up when someone comes into your room with the introduction, "I want you, please, to tell me what I may eat and drink." How your outward man at once congeals into a smug sitting-for-your-portrait sort of mien; and your inner man attempts to see things honestly as the patient sees them and to reason out the possibility that for this individuality dangers hitherto undreamed of may really lurk in every article of daily food, except perhaps toast and whisky, which seem very seldom to disagree. You have some of you no doubt felt, as I have often done after interviews of this kind, that an inward soreness has been left behind, a halt

questioning doubt whether in thus accepting such childlike faith one has not put back the promise of the future. For if the public will ask our advice about details upon which, if they only thought for a moment, they would see that they themselves must of necessity be far better judges than ever a stranger to their habits can be, what hope is there that they will ever be able to consider with you those weightier matters of the law, those subtle aberrations of function, those insidious early changes that constitute the beginnings of disease? Yet unless they are in some measure able to follow these with their medical advisers how can they possess their souls in patience—how can they ever be far off the patent medicine or the quack? And from these, in that future we shall not see, but which will yet surely come, may medicine be emancipated.

An Address
ON
THE SURGERY OF TO-DAY AS COMPARED WITH THAT OF TWENTY-FIVE YEARS AGO:
ILLUSTRATED BY THE WORK IN THE GENERAL INFIRMARY AT LEEDS.

Delivered before the Leeds and West Riding Medico-Chirurgical Society on Oct. 18th, 1895,

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GENTLEMEN,—I must first thank you for the honour you have conferred on me by electing me to the most distinguished position of President of this important society, which, both on account of its members as well as from the value of its papers and discussions, not only holds a premier position among the provincial but is second only in general interest to two or three of the chief metropolitan societies. It is customary for your President to deliver an address at the opening of the session, and as my predecessor in this chair reviewed the work of this society up to last year I have had to look around for another subject. I thought that a comparison of the surgical work of to-day in the General Infirmary at Leeds, the institution in which we regularly meet, as compared with that of twenty-five years ago, might prove of sufficient interest, as it would tend to show what a reformation—or shall I term it a revolution?—in surgical thought as well as in the science and art of surgery has taken place in the past quarter of a century. To those of my hearers who, like myself, have passed through this most critical period of the history of surgery, it is most evident that the changes in these twenty-five years are simply marvellous, and if we compare the report of the Leeds Infirmary for 1870 with that for the year 1894, issued in 1895, we can see not only that the mortality all round has lessened, but that in certain operations, had not a change come, their performance would have had to remain a matter of history, since the mortality was so high as to render them almost unjustifiable. The number of operations has increased remarkably. Whereas there were in 1870 271 general and 198 ophthalmic operations, making a total of 469, in 1894 there were 1527 general, 1200 minor, 1171 ophthalmic, and 141 gynæcological operations, making a total of 5039; and whereas the all-round mortality in 1870 was 6·6, in 1894, although the magnitude of the operations performed was in many cases infinitely greater, it had fallen to the notably low percentage of 1·2; so that if the number of operations had been equal in the two years, and the mortality had remained the same, there would have been 332 deaths in 1894 instead of 60. An analysis of the hospital registers for the years named affords some interesting and startling facts; for instance, in the 1894 report the following operations are recorded which have no place in the report of 1870: radical cure of hernia, of which no less than 53 cases are given; osteotomy, 69 cases; removal of vermiform appendix for recurrent appendicitis; cholecystotomy and other operations on the gall-bladder; enterectomy, prostatectomy, gastrotomy, pyloroplasty, hysterectomy, nephrectomy, laminectomy, laryngectomy, bone-grafting, nerve-grafting, and others, all of which are now well-established, useful, and successful operative measures. In the same way a reference to the registers shows that some surgical diseases, unfortunately too common in 1870, are now happily rare, and in some instances have no place in the record of 1894. I refer to hospital gangrene, phagedæna, pyæmia, erysipelas, septicæmia, secondary hæmorrhage, and such-like surgical misfortunes. No better example can be given than that of tetanus; for twenty-five years ago it was not very unusual to see this fatal disease follow even slight operations, yet during the last fifteen years I have not seen a single post-operative case, all instances that have come under observation having occurred after neglected wounds received outside the hospital.

Perhaps in no class of cases has greater progress to be recorded than in abdominal diseases, which formerly were for the most part treated expectantly in the medical wards. For instance, in 1870 and 1871, under the heading "Abdominal Section" no case is recorded; in other words, the peritoneal cavity was only opened for ovariotomy and for strangulated hernia; whereas in the two years 1893 and 1894 573 patients had abdominal section performed in this hospital, the all-round mortality—including malignant cases, strangulation of gut, cases of acute intestinal obstruction, internal gangrene, suppurative peritonitis, &c.—showing a mortality of 12·2, or a saving of life in 87·8 per cent. The statistics of ovariotomy in this hospital twenty-five years ago were so bad that tapping was frequently resorted to in order to defer the major operation, and even in 1875 12 patients were thus treated, only 7 having been submitted to the radical operation. Out of these 7, 5 died, yielding a mortality of 71·3 per cent. On the other hand, in the years 1893 and 1894 ovariotomy was performed 132 times with 123 recoveries, giving a mortality of 6·8 per cent., and seeing that this includes malignant cases as well as patients extremely ill in other ways, the mortality is one of which no hospital need feel ashamed. For it must be borne in mind that statistics are in no way considered, and if an operation offers any chance of giving relief it is resorted to. Only a few years ago it was the custom to treat these cases in single wards and to have two special nurses for each, but as the work increased this was found to be impracticable, it being impossible either to provide sufficient small wards or nurses, and it soon became manifest that the patients treated in the general wards recovered equally well. Hence, isolation was given up, and it is now the custom to operate on these cases in the theatre and to remove them to the general wards, just as is done with other surgical cases.

Compound fractures afford a bright example of progress in treatment, for instead of amputating where the large joints are opened or where the bones are extensively smashed and the soft parts lacerated, and instead of the majority of cases having to go through a tedious process of healing by granulation, possibly with the complication of abscess and secondary hæmorrhage, and after many weeks or months recovering with stiffened joints and impaired functions, at the present time, although joints may be opened and the bones severely smashed, so long as the circulation can be carried on amputation scarcely enters into the question, and the limb is put up, after purification of the wound, with every prospect that the case will pursue the ordinary course of recovery like a simple fracture. Thus there is not only effected a great saving of life and a much more rapid restoration of function, but a marked diminution in the time spent in hospital. In this way, as well as in the treatment of joint diseases, surgery has become much more conservative and amputation is now only looked on as a *pis aller*, and almost as a sign of failure; though, if amputation has to be done, the mortality of to-day compares very favourably with that of twenty-five years ago, for, including all the major amputations, the mortality of 1870 was 20·8 and of 1875 25·60, whereas in 1894 it was only 11 per cent. This conservative tendency is exemplified by the care exercised to attain perfection in the repair of injured tissues, whether accidental or operative; for instance, it used to be considered satisfactory to bring all the tissues in an abdominal wound together by sutures piercing the whole thickness of the abdominal wall, the result not infrequently being a yielding of the cicatrix and the development of a ventral hernia; but by bringing peritoneum to peritoneum, muscle to muscle, aponeurosis

to aponeurosis, and skin to skin, the integrity of the parts is restored and permanent weakness avoided. In no class of wounds does this great care show to more advantage than in injuries of the forearm and hands, where suture of tendons and nerves is thought of as much importance as union of skin; even if there be a deficiency of nerve or tendon modern surgery is equal to the occasion, since grafting of both can be successfully effected. The aiming at cure, or as nearly as possible at complete restitution, rather than simply at relief, is exemplified in the performance of ovariotomy in place of paracentesis, of excision of joints in place of amputation, of erasion or simply removal of disease instead of excision, of enucleation of thyroid tumours instead of thyroidectomy, and of prostatectomy in place of drainage or frequent catheterism. The operation for strangulated hernia illustrates not only the greater success 12·5 per cent. mortality in 1894—against 33·3 in 1870 and 60·6 in 1874—but the difference in aim of the modern surgeon, for in 1870 the saving of life was, as a rule, simply considered, and the patient on recovery was left more crippled than ever, since the hernial aperture was as a rule larger, whereas at present the radical cure is considered an essential part of the operation. In consequence of the almost absolute safety of operative interference at an early stage of strangulation, and the almost certain cure of the hernia, very little time is wasted on taxis, and operation is urged as being a blessing, though in disguise. Even in those very terrible cases where, through ignorance or neglect, the intestine becomes gangrenous, unless the patient is too ill to bear more than a mere incision, instead of establishing an artificial anus a cure is aimed at by excision of the gangrenous loop and restoration of continuity by means of simple suture or by means of some apparatus such as the decalcified bone bobbin or the metal button, the closing of the neck of the sac so as to form a radical cure completing the operation.

In the treatment of certain impacted fractures such as Colles's fracture of the wrist at any age, or impacted fracture of the cervix femoris in a healthy young or middle-aged man, union is certain if the case be left to nature, but I take it that any surgeon would feel dissatisfied with his work if he simply rested content with securing union without restitution. In the same way, in transverse fracture of the patella bony union and complete restitution, which were once rare events, are now definitely aimed at either by extra- or intra-articular suture. The tendency of modern surgery is to be thorough, this being well exemplified in the treatment of malignant disease; for instance, in cancer of the breast no surgeon would now consider his work satisfactory who simply removed the tumour without amputating the whole of the breast as well as clearing out the axilla, just as in cancer of the cervix uteri he will perform supra-vaginal amputation or complete hysterectomy no matter how early the disease be discovered. The benefit of this thoroughness is shown in the lengthened respite or in some cases in the complete cure. That the thorough operation in these two classes of cases which have served me for examples is safe is shown by the 1894 statistics, for, of the 36 amputations of the breast and of the 9 hysterectomies for cancer, all recovered. I might have mentioned two other examples of the thorough removal of malignant disease in laryngectomy for malignant disease of the larynx and proctectomy for cancer of the rectum, both of them being comparatively new and successful operative procedures.

In the days when any simple operation wound might be followed by serious complications the advice necessarily given, where the question was one of mere disability or of deformity, was, "Be content with the ills you have rather than those you know not of"; but now that wound complications with due precautions can be discounted our sphere of usefulness is widely extended, and our advice as to operation is well exemplified in the report for 1894, where it will be found that besides the 53 radical cures of non-strangulated hernia for the removal of disability no less than 64 osteotomies were performed for the rectification of crooked legs or thighs, to say nothing of the numerous plastic operations performed simply for their æsthetic effect. I remember the time when healing by granulation was considered quite satisfactory, and occasionally the surgeon would be gratified by obtaining primary union; now not to obtain healing by first intention in clean operation wounds is considered discreditable to modern surgery and to the institution in which it occurs. Then, not only daily, but several times a day, the dressings had to be changed, whereas at the present time one dressing is applied at the operation, and as a rule is not changed for a week or longer or until the wound is quite healed. I find that so late as 1880 over five tons of linseed were supplied to the infirmary to be used as poultices for wounds, whereas in 1894 the amount was so small that it is not entered in the list of stores, and at the present time I think the student would have to make his acquaintance with this commodity outside the surgical wards. On the other hand, the amount of cotton-wool supplied last year was over five tons, it being chiefly used in the manufacture of the antiseptic dressings salufer or salicylic wool. Although an improvement in results was steadily being brought about by increased cleanliness and by improved sanitary arrangements it was not until the introduction of the antiseptic system by the father of modern surgery, Sir Joseph Lister, that surgery emerged from the darkness and uncertainty which had surrounded it for ages to the scientific accuracy and greater certainty of the present time. The truth of this is proved, if proofs were needed, in the facts I have mentioned, culled from our own hospital records, which are open to all. The change was not simply a gradual evolution, but a well-marked revolution, not depending so much on merely manipulative dexterity (for our hospital twenty-five years ago could boast of the greatest surgical skill) as on an increased knowledge of the causes of surgical disaster and how to avoid them. While on this subject it would be base ingratitude to pass on without an expression of profound sorrow for the loss sustained by science and by mankind in the person of M. Pasteur, that genius who, from the discovery of the causes of aberration in the processes of fermentation in alcoholic beverages, extended his theories so as to enlarge the whole range of pathological thought by showing the intimate relation between fermentation and contagious disease, an extension of this study leading, as we all know, to the practice of antiseptic surgery. Since the Listerian reformation in surgery evolution has been taking place all along the line both in surgery and among surgeons themselves.

The time has passed for the surgeon to be obstetrician, general practitioner, physician, and surgeon blended in one; the true surgeon must give his life to his work, and must be an artist as well as a scientist, conversant at the same time with physiology and pathology as well as with anatomy and bacteriology; he can no longer shirk the work of diagnosis and accept the dictum of the physician as to when he should operate or decline to operate, but he must be able to use his brains as well as his hands in order to attain to an ideal. Nowhere is more judgment required than in those difficult cases, most frequently abdominal, where, even with the co-operation of his medical *confrère*, only an approximate diagnosis can be arrived at, and where the awaiting of developments which would clear up the mystery means the loss of life. In such cases exploratory operations, because of their safety, are becoming more and more frequent; in the 1894 report 10 such are given, all of which recovered; but this does not represent the whole of the truth, for in many cases the designation is afterwards affixed to the bed paper though the operation began as an exploratory procedure. In other words, whereas formerly diagnosis was considered essential before operative interference, now operation at times precedes diagnosis. The increasing tendency to "operate when in doubt" will do much to lessen the number of cases to which "too late" has yet to be applied. The surgeon never had such responsibility resting on his shoulders as at the present time, for it will no longer serve him to blame the supernatural for his own oversights or auto-infection for germs introduced by himself or his assistants. Knowing what we do of the causes of wound complications, and how without that knowledge it was practically impossible to avoid them, it should excite in the mind of the surgeon of to-day the most lively admiration of the able men who brought our art to the state in which it was in the period preceding the antiseptic era. Although they were disquieted by failures which they believed to be beyond control they had the courage to rise above their disasters and in many cases to score successes which the modern surgeon might consider impossible under such adverse circumstances. In accepting the responsibility of operative work the surgeon has to place himself to a certain extent in the hands of those assisting him, and as the strength of a chain is tested by its weakest link, so his success may be marred by the ignorance or the carelessness of another. In hospital work and in

surgical clinics this difficulty does not arise, as the surgeon can carefully select his own assistants. In a school so large as the medical department of the Yorkshire College, and with the large amount of clinical material at our disposal for the purposes of teaching, the student has every possible advantage to make himself proficient, and while dresserships are available for all, to those who are diligent and who choose to avail themselves of their opportunities the resident appointments at the infirmary are open, so that the want of skilled assistants is never felt in hospital practice, though in private work at the homes of the patients the difficulty is at times not a little embarrassing. Hence I think it will be found that at the present day, given the skilful and careful surgeon, his success will be greatest in the following order—(1) at the surgical clinics where he is personally responsible for the assistants, nurses, and general *entourage;* (2) in his hospital practice, where the responsibility is divided and where his assistants are frequently changing; and (3) in the private homes of patients where the surroundings are often ill-adapted to the purpose and where the responsibility is still further divided.

Twenty-five years ago I think it would have been found that the greatest success followed the surgeon's efforts in the homes of his patients and the least in his hospital wards, because of the prevalence of wound complications in the latter and the greater purity of the air and of the surroundings in the former. Surgery has, however, not yet attained its goal, and much good work remains to be done. The members of this great society, as they have in the past, will doubtless in the future contribute their share; not only in surgical but in medical science in its various branches has the society done useful work and signalled progress, as we hope and believe it will continue to do in the future.

GLEANINGS FROM SURGICAL PRACTICE.

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I.

I PROPOSE in the following papers to collect and hand down to those who may be interested in past surgical work some of the lessons which can be imparted to others out of the many that I have learnt during a somewhat extensive surgical experience, and in so doing to record brief notes of such rare and exceptional cases as I now, after a process of free elimination, find retained in my notebooks; for during the past year, when occupied in looking over my records of hospital and private cases, I speedily realised the conclusion that, whilst the notes *en masse* would, when I have passed over to the majority, be useless to anyone, some of them, and particularly those of private cases, might be misemployed. Under these circumstances I have submitted all my notes to a process of sifting, and after throwing away what may be called ordinary examples of disease or injury I have preserved only such as appear to be typical, rare, or exceptional, and I must add that the notes of most of these have been condensed down to what could be recorded upon a half-sheet of note-paper. From these condensed notes of sifted cases I shall illustrate this and all future papers.

I.—INJURIES OF THE ABDOMEN WITHOUT EXTERNAL WOUNDS.

For the first of the series I have selected those which refer to the subject of injuries of the abdomen without external wounds, since it can hardly be open to a question that the diagnosis and treatment of this class of cases are, as a rule, very puzzling to most practitioners, not only on account of the difficulty which is always experienced in arriving at an accurate diagnosis of the nature of the injury which may have been sustained, but because there are no cases which call for more prompt or decided measures when the diagnosis of the case is sufficiently clear to allow of such being carried out; indeed, it is on account of this uncertainty of diagnosis that so many cases of abdominal injury are too often allowed to drift until the hour for active beneficial interference has passed, and the surgeon learns too late in any individual case from its necropsy that by the help of his art repair might have been rendered possible and recovery probable. How to make the diagnosis of these cases more certain will form an important part of this paper.

In estimating the nature of the injury in any individual example care should always be taken to learn from the eye-witnesses of the accident every detail connected with its occurrence which can be obtained, particularly as to the nature of the force which has been applied, and the direction of its application with reference to the position of the patient at the time of injury. The condition of the patient's clothes should also be well looked to, for by such a scrutiny a conclusion may be deduced as to the exact seat of impact or direction of the injuring force; indeed, these points taken together much help the surgeon to form some conclusion respecting the nature of the case he has to treat after its due investigation. It must always be kept in mind that a case, which may at first sight appear serious from having been the result of the application of a powerful force, may in its progress prove to have been of the nature of a trivial injury; whilst, on the other hand, a case that may have been regarded as one of a trivial nature from having been brought about by a slight force may be followed by the gravest consequences. Thus I have seen the two side wheels of a four-wheeled waggonette holding two adults pass over the abdomen of a boy aged six when on his back without doing more harm than that produced by fright; and I have known the blow from a stone the size of a walnut thrown from afar, after striking a girl aged seven on her abdomen, produce a rupture of the small intestine which caused death. And yet the fact to which I have drawn attention and the cases I have quoted to illustrate it must not mislead us, for it is essential that all surgeons should acknowledge that, as a rule, the greater the force applied to the abdominal contents the greater probably will be the injury the viscera and vessels have sustained. Thus the passage of a wheel over the abdomen, as a diffused, dragging, and crushing force, is most likely to be followed by a bruising or laceration of parts; whereas the blow of a stone, a fall upon a stone or small blunt object, a kick, or like injury, where the force of impact has been quite local, is more prone to produce in a distended hollow viscus a local rupture. It is also always to be remembered that the condition of a hollow abdominal viscus—whether full, half full, or empty—must have an important influence in determining the consequence of any external violence; so that where the local application of a force to a distended organ may in one case produce a fatal rupture, the application of the same or even greater force applied to the same viscus when empty will be followed by no serious result. In all abdominal injuries it is well, therefore, for inquiry to be made as to the relation of the time of the accident to that of the antecedent meal or act of micturition, since with the knowledge so acquired the diagnosis of a case is helped and made more certain, and its treatment is more likely to be successful. Again, it must always be acknowledged that in any example of abdominal injury a liver or spleen may be fissured or even crushed without giving rise in its early hours to any such symptoms as will lead the surgeon in attendance to diagnose the presence of such an injury; although when collapse has immediately followed the accident and the force which has been applied to the abdomen has been great, and when the state of collapse persists or becomes more marked, some suspicion of its presence should certainly be excited; or, again, should, as the early hours pass without shock, a sudden collapse occur, fatal or otherwise, the fear of a secondary hæmorrhage having taken place must arise; or, as days pass, symptoms of peritonitis show themselves, the probability of the breaking down of some bruised or injured tissue should not be overlooked. Again, a hollow viscus may be bruised or partly torn, but not through all its coats. At one time the serous covering may be split, but not the mucous; at another the reverse condition may exist; and under such circumstances, if the case be rightly treated, all may eventually go well. In a hollow viscus, where the mucous membrane lining its lumen has been torn away from its muscular and serous coverings, symptoms would exist which should be recognised, and with such an injury complete repair may be obtained. Cases will be quoted to illustrate these points.

The chief effects of any abdominal injury as well as those which are the immediate causes of death may be enumerated as four—namely, shock, hæmorrhage, extravasation of the visceral contents, and peritonitis, the first two

and the last two causes of death being more or less intimately associated.

Shock or collapse is under all circumstances an alarming condition, since it always means a tendency towards death and suggests by its presence in any case of injury to the abdomen some serious visceral or vascular complication; and yet experience tells us that as a primary symptom in these cases it is often unreliable, for it is not uncommon to meet with examples of severe injury to the abdominal viscera which are associated with but slight collapse as an early symptom; and it is at least as common to find grave and at times prolonged shock present in the early hours of a case which eventually turns out to be one of quite a trivial nature. Nevertheless, shock or collapse is always indicative of danger, and if not evanescent had better be interpreted as a significant sign of some serious visceral or vascular complication with or without hæmorrhage. Again, collapse in some instances of abdominal injury may pass away wholly or in part, to return either slowly or suddenly after the expiration of a few hours or days. This form of collapse should be called "relapsing collapse," and when it occurs it always means mischief, and probably serious mischief, for it either indicates the existence of secondary hæmorrhage or the giving way or separation of some damaged tissues. Indeed, this relapsing collapse has for diagnostic purposes much the same value as that possessed by a persistent primary shock or collapse which immediately follows an accident, although the relapsing form indicates either a secondary hæmorrhage at the seat of injury rather than a primary, or some secondary giving way of a tissue which had been damaged by the accident but not at the time separated, this secondary separation of tissue being brought about either by an absence of repair at the seat of injury or by some ulcerative process. In either case the relapsing collapse is due to a secondary hæmorrhage or to the extravasation of the contents of some hollow viscus, or it may be to the combination of both. By way of conclusion it may therefore be accepted that in every case of abdominal injury in which shock or collapse is a prominent symptom it is reasonable to entertain a fear that either hæmorrhage or visceral rupture may be the cause. If the symptom persists or becomes more marked that fear must be strengthened and even become a certainty; although, on the other hand, the reverse does *not* hold good, since a serious and necessarily fatal consequence of injury may exist with only a very slight or evanescent indication of shock. Shock or collapse as a relapsing symptom is, however, always indicative of a serious complication.

Hæmorrhage as a consequence of an abdominal injury and as a cause of death is very common, although it must be understood that shock may be present in a severe, if not fatal, form without hæmorrhage. The symptom is thus clearly due to some effect of the injury acting through the sympathetic nervous system upon the cardiac plexus and so upon the heart. In my work on the "Practice of Surgery"[1] I quote two cases which seem to support this view. Such a conclusion should never, however, be accepted in any given case without the most careful and complete examination of the body after death. When collapse is persistent or becomes more marked the presence of hæmorrhage should be diagnosed, although its exact source may be a dark point. It may have come from a fissure, laceration, or crush of a solid viscus, such as the liver or spleen; it may have come from a lacerated or ruptured hollow viscus, or from some tear in a mesenteric or other vein or vessel. When collapse shows itself in the relapsing form it is certainly reasonable to conclude that it is due to a secondary hæmorrhage brought about either by the giving way of a vessel that was injured but not torn at the time of the accident, or to the separation of part of a solid viscus which was so crushed by the force which caused the injury as not to be followed by primary bleeding, but which as time passed and shock diminished subsequently separated, either as a consequence of some unfortunate movement which was allowed under a mistaken view of the nature of the case, or which was made without leave, or which took place during the muscular effort caused by defecation.

Extravasation of the visceral contents may take place either as a direct consequence of an abdominal injury or as a secondary result, this secondary result being due to the giving way of a part which might have been contused at the time of the accident, but in which there was no absolute solution of continuity, the subsequent rupture taking place by either the casting away of the contused tissue as a slough, or by a process of ulceration which has taken the place of repair at the part injured, or it may be by a rupture from over-distension of the injured hollow viscus. Under the former circumstance, when the rupture has been the direct result of the accident, it is more frequently than otherwise associated with hæmorrhage, and in the latter circumstances, when it has been brought about by secondary causes, it is more frequently than not associated with first a local and subsequently a general peritonitis. A full recognition of the truth of these preliminary observations ought to be present in the mind of every surgeon before he approaches a case of injury of the abdomen with a view to its diagnosis and treatment; and it is with this feeling very clearly fixed in my own mind that I now pass on to consider the difficult subject of diagnosis of an abdominal injury.

The Diagnosis of Abdominal Injury.

Although from what has been written a feeling of uncertainty must predominate in the mind of every surgeon when he approaches a case of injury to the abdomen with a view to its diagnosis, that of blank dismay as to success must not be allowed to reign, for with a methodical investigation of any case from first to last enough information will usually be obtained to justify the formation of a provisional diagnosis which will be sufficiently clear to sanction the laying down of a clear and scientific line of treatment, although both the diagnosis and the treatment based upon it may require modification as symptoms change and the true nature of the case by its progress becomes more defined. As a primary line of investigation the surgeon should, as already advised, as a matter of routine inquire in every case from those who may have witnessed the accident as to the character and degree of force which had been applied, with the direction of its application, and more particularly with reference to the position of the patient at the moment of its application and to its seat of impact, and these inquiries should be followed by the careful scrutiny of the clothes of the injured one; for by adopting these methods of preliminary inquiry valuable suggestions as to the probable nature of the injury may be raised which must prove of value in directing the attention of the surgeon into a right channel; indeed, with such evidence alone the surgeon will occasionally have for a time to be satisfied. The examination of the injured region should come next in order, and this examination should be very carefully undertaken with the full recognition of the fact that the gravest internal abdominal injuries may coexist with the slightest or even with no external evidence of mischief; and that marked evidence of external mischief to the abdominal parietes may be associated with absolute immunity from injury of the abdominal contents. Should no external evidence of abdominal injury be visible after due inspection, the surgeon must not allow himself to be put off his guard, and more particularly when he has received reliable information from those who had seen the accident as to its true nature. Indeed, upon such circumstantial testimony the surgeon, for the time, may have chiefly to rely, not only for his provisional diagnosis, but for the line of treatment he should lay down, although that treatment may be simply one of expectancy, which will have to be modified by either the development of fresh symptoms or by the disappearance or modification of such general symptoms as may have been at first present. should marked ocular evidence of local injury be found—and this local evidence tallies with the circumstantial history of the accident which had been obtained and the general symptoms of shock or collapse which followed the accident—the diagnosis of serious internal mischief would be justifiable, although such a diagnosis would be either weakened if the general symptoms of shock or collapse had been but slight or of a passing character, or in the same way strengthened if the indications of shock or collapse instead of passing off had become more marked or of a steadily intensifying character—the persistency of shock or collapse, or its sudden or gradual intensification, being under all circumstances of abdominal injury a symptom of grave import, either with or without ocular evidence of local injury.

With respect to *vomiting* as an indication of mischief much might be said. The mere evacuation of the contents of the stomach after the receipt of the injury is to be looked for as a consequence of shock, and is not, therefore, significant, although should vomiting appear without the presence of shock it is a serious indication. When the

[1] Practice of Surgery, vol. ii., p. 884. Fourth edition.

stomach has, however, once emptied itself, its action, if the result of shock alone, should cease; consequently when vomiting persists or reappears after it has once ceased some serious intestinal mischief should be suspected. The earlier the appearance of vomiting after the receipt of the injury, and the more persistent the symptom, the greater is the probability of some rupture of the upper part of the small intestines. The later the appearance of vomiting after the injury the greater is the probability of the seat of rupture being lower down, for it is certain that the small intestine may be torn or perforated in its lower region, not far from the cæcum, without being associated with vomiting at any time, or should vomiting appear it will not do so for some ten or more hours after the receipt of the injury—that is, until some secondary shock has taken place as a result of extravasation of the contents of the ruptured bowel, or septic peritonitis has set in. When blood is found to be mixed with the evacuated material at the first vomit a suspicion of some injury to the mucous lining or other coats of the stomach should be excited. When it is absent in the early vomit and appears later the probability of some intestinal rupture high up, as in the upper extremity of the jejunum, is raised. Rupture of the large intestine *per se* is not in my experience attended with vomiting of blood, but rather with intestinal hæmorrhage.

The value for diagnostic purposes of the *passage of flatus* or its expulsion from the bowel per anum with or without motion deserves more than a passing notice; for, strange as it may seem, it is but true that a patient with a lacerated wound of his ileum 3 ft. from the cæcum, and who died on the eighteenth day, had two natural actions of his bowels during this period. A man who had a rupture of the middle of his ileum from the kick of a horse, and who lived but forty-eight hours, passed flatus downwards freely. A man aged forty-one, who died on the fourth day from suppurating peritonitis due to fæcal extravasation the result of a complete rupture of the ileum 3 ft. above the cæcum, passed flatus freely and had a natural motion. A boy aged six who died six days after an injury produced by the treading of a horse, which caused a double perforation of his small intestine, one being 14 in. from the pylorus and the other 1 ft. lower down, had two natural actions of the bowels. A man aged twenty-one who lived eighteen days after the passage of the wheels of a heavily-laden van over his abdomen, which had ruptured his ileum above the cæcum, had two natural motions, although he died from peritonitis due to extravasation. And lastly, a boy aged sixteen who was hurt by the wheel of a cart passing over his abdomen, and died on the fifth day after the passage of a motion which was followed by collapse and death, was found to have had secondary hæmorrhage into the abdominal cavity from the separation of a mass of liver which had been crushed at the time of the accident, the muscular exertion which attended defecation having doubtless brought about this sudden death.

Pain as a symptom of diagnostic value is at times very confusing, for its absence is by no means to be accepted as being any evidence of the trifling nature of an abdominal injury, and its presence even to a marked degree supports no argument in favour of severe trouble; for pain in abdominal injuries is always to be estimated, as in all others after a due consideration of the personal equation. Still, persistent local or general abdominal pain is always a symptom of importance as well as of gravity. In most cases it is central and radiating. Pain seems to be, so far as its severity is concerned, about the same in injuries of the solid as of the hollow viscera; it may likewise be slight in visceral injuries and severe in integumental.

With these preliminary general remarks upon the causes, effects, methods of investigation, and diagnosis of abdominal injuries, I propose to quote the brief notes of such cases as may illustrate their truth; and first of all of the statement which is so important to bear in mind: That abdominal injuries which have been brought about by severe external violence, and are associated with external features and general symptoms which suggest grave internal complications, may in their progress prove that such an inference was incorrect and that the internal injury was really trivial.

CASE 1. *Severe abdominal crush without intra-abdominal mischief, but with hæmorrhage into the orbits.*—The patient was a man aged thirty-two years who was admitted under my care into Guy's Hospital on May 2nd, 1873, for an injury he had just sustained when cleaning his railway engine. The engine moved when he was at his work, with his abdomen resting upon its crank, and in so doing crushed him between the crank below and the body of the engine above. He was rendered perfectly insensible by the accident, as well as collapsed, and in that state he was brought to the hospital. His abdomen was found on his admission to be generally bruised, especially upon its left side, and his eyes were blackened from blood effused into the eyelids, as well as into both orbits, the blood coming forward from behind the eyeballs. There was, however, no paralysis. Consciousness returned in about ten or twelve hours, when he complained of intense abdominal pain, and his pulse improved. His urine, which was drawn off, was quite clear. As hours passed no fresh symptoms appeared, and with each day it became evident that his abdominal injury had not involved any viscus. In the course of a few weeks he left the hospital convalescent, although the subconjunctival hæmorrhage had not disappeared. It is to be noticed that in this case there was no vomiting, and that although the character of the accident more than justified a diagnosis of a serious abdominal injury, yet from the progress of the case it became clear that the viscera had escaped. The hæmorrhage into the orbits and eyelids indicated by its presence that the abdominal pressure must have been very severe, the bloodvessels having doubtless ruptured from their over-distension brought about by the abdominal pressure. I have, however, seen this orbital hæmorrhage before in a case of crushed thorax, but with it there was also bleeding from both ears; recovery likewise took place in that case.

The next statement I wish to prove is the reverse of the last, and that is that the gravest internal abdominal injuries may coexist with the slightest or with no external evidence of mischief, and even without shock or collapse.

CASE 2. *Ruptured liver; death on fifth day.*—In October, 1883, a boy aged sixteen walked into Guy's Hospital after having been run over by the wheel of a cart which had passed over his abdomen. The boy, although in pain, had walked at least a quarter of a mile to the hospital after the accident. When admitted he was pale and in great pain, but his pulse was full and there were no external signs of injury. When put to bed he vomited, but there was no blood in the vomit. His urine, which was passed naturally, was clear. On the second day his abdomen became more distended and hard. His pulse was 104. On the fourth day he passed flatus downwards, but no motion. On the fifth day he rested with his legs outstretched, but rather to the right side, and later on the same day he had an action of the bowels, which was accompanied with severe abdominal pain and speedily followed by collapse and sudden death. After death a fissure three inches deep was found in the right lobe of his liver, filled with blood-clot and covered with lymph. There was also evidence of slight peritonitis about the seat of injury. It seems more than probable that in this case recovery might have taken place if the straining for a motion had not been called into requisition.

CASE 3. *Ruptured spleen; death on twelfth day.*—A girl aged five was run over, a wheel passing over the upper half of the abdomen, and admitted into Guy's Hospital in 1873 with a fractured jaw and injury to the left side of the thorax, but without any evidence of abdominal trouble. No fracture of the ribs was made out, although it was suspected from the difficulty of breathing which was present from the first. The child seemed to be doing well and about the fourth day was able to sit up in bed. On the eighth day abdominal symptoms appeared suggesting peritonitis, and then, rapidly increasing, proved fatal on the twelfth day. After death, besides the fracture of the jaw, the fifth left rib was found to have been broken as a green stick, and there was some recent lymph about the left lung, and on separating the intestines, which were distended and inflamed, some four or five ounces of grumous blood were found about the spleen, which was ruptured on its anterior edge. In this case there was no evidence whatever of intra-abdominal injury, and nothing except the nature of the accident to suggest the probability of its presence. The development of peritonitis raised the question very definitely, although the true cause of the abdominal mischief was only revealed at the necropsy of the case. The case shows very clearly that a spleen may be ruptured by some external violence, and that the symptoms primarily associated with such an injury may be absolutely negative.

CASE 4. *Ruptured jejunum.*—That a bowel may be partially or wholly divided as the result of an injury, and yet

be associated with no such severe symptoms as to suggest the true nature of the accident, is a truism which should always be recognised. Thus, a man aged forty walked into Guy's Hospital on June 23rd, 1877, after having received a kick from a horse on his abdomen. He appeared to be so slightly injured that his friends wished to take him home, for he was neither sick nor collapsed and only complained of local pain where he had been kicked. As a means of precaution he was, however, put to bed, although to die within thirty-six hours from acute peritonitis. At the necropsy, besides evidence of general peritonitis, intestinal contents were found in the peritoneal cavity, and great difficulties were experienced in finding the seat of the rupture; indeed, the bowel was carefully looked through twice without success, and it was only by distending the bowel slightly with water that the leak was found in the small intestine through an opening about a sixth of an inch in diameter situated about three feet below the duodenum. The edges of the opening were everted, and the opening was covered with lymph.

CASE 5. *Ruptured ileum.*—A man aged forty-nine when working at the river-side was knocked down by a falling bale of wool and doubled up. He was at once taken to Guy's Hospital, when he was so free from pain and shock that he walked up two flights of stairs to the ward. When examined a fractured clavicle was found, but there were no indications of any other injury. As a matter of precaution the man was kept in the hospital for the night, when about ten hours after the accident he suddenly became collapsed and died in two hours. At the necropsy some slight ecchymosis was seen over the abdomen, and upon opening this cavity the intestines were found partly covered by omentum and matted together by lymph and blood mixed with some fæcal matter. A portion of intestine six feet from the cæcum and situated beneath the umbilicus was found to be lacerated on its mesenteric side for two-thirds of its circumference, and through this rupture extravasation of fæces to a very limited extent had taken place. There was also evidence of local peritonitis at the seat of injury.

CASE 6.—A boy aged thirteen, after a blow on the abdomen, walked a mile with but little assistance, and when he died—thirteen hours after the accident—the duodenum was found to be completely torn across.

CASE 7.—A man aged twenty-five walked into Guy's Hospital after receiving an abdominal injury and complained only of local pain. He lived thirty-six hours and died collapsed. After death his duodenum was found to be ruptured.

These brief notes of seven cases are enough to prove the point for the illustration of which they have been quoted, and they should so impress the minds of all surgeons who read them as to lead them to accept the statement that the gravest internal abdominal injuries may coexist with either the slightest or with no external evidence of mischief, and even without shock or collapse or other general symptom to suggest their presence. With this assurance in their minds surgeons will then recognise, more than probably some do now, the value and importance of the history of every case of abdominal injury, and thus be led to regard as probable what might otherwise have been regarded as vaguely possible—the presence of grave intra-abdominal mischief, with the absence of grave symptoms, when the nature of the injury has been such as might reasonably have been expected to have brought it about. With this view predominant in the surgeon's mind a careful expectant treatment would naturally be adopted and much harm consequently be avoided. In the cases which have been quoted the truth of this conclusion has been well demonstrated.

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FOOTBALL CASUALTIES.—Last week, in a match between the Fishpond and Bristol teams, a player for the former sustained a fracture of his leg.—On Saturday last the following accidents occurred: During a match at Egerton Park, Hopewood, between the Heywood Rovers and Ramsbottom teams, a full-back player for the home team fractured his clavicle.—The captain of the Royal High School team, and last year one of Scotland's three-quarters, in a match between the School and the Stewartonian teams, fractured one of his ribs.—During a match at Lawrence-road, Wavertree, between the Toxteth and Huyton Quarry Clubs, a player of the latter club fractured his leg and was removed to the Southern Hospital, Liverpool.—In a match at Rochdale, a player with the Horridge Club received such serious injuries to his head that he died on Monday last.

ON THE SENDING OF PHTHISICAL PATIENTS ABROAD.

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AUTUMN is full upon us and has displayed almost winter severity, and with the change in the weather comes the important question of deciding upon winter quarters for our phthisical patients. "Go abroad" is advice so easy to give and often so difficult to follow. I propose to consider what are the difficulties in the way of acting on such good advice. I shall assume that it is best for a phthisical patient to winter in a good climate if possible, but I shall not discuss the different winter resorts or compare them with one another. I shall devote attention chiefly to those individual or personal factors in the problem which constitute its real difficulty, and upon the due appreciation of which the value of the advice given depends.

Climate is not a cure for phthisis, but it may help a phthisical patient to get well. There is probably no place on earth where phthisis cannot exist, and though where the air is pure and the conditions of life sanitary there will be little phthisis or none at all, still even there if the conditions of life are altered and if they become less sanitary or even unwholesome phthisis will develop or increase. Thus it is that there is more phthisis in towns than in the country, and in the crowded parts of the same town than in the less crowded parts of it. Even in Australia, which was once thought to be free from phthisis, it is now becoming the same scourge it is elsewhere, and especially in the large towns. Sunlight and fresh air are potent remedies for phthisis, and those places are best for phthisical patients where they can be longest out of doors in bright sunshine and in pure air. A good climate is a place to get well in or to convalesce in, and in order that a phthisical patient should derive full benefit from such a climate he must be more or less convalescent—i.e., getting better, or at any rate not getting worse. In other words, the phthisis must not be in the acute or active stage. Even in the best of climates the patients must still be treated as invalids or convalescents, and must be taken the ordinary care of such as prudence and common sense would suggest. No climate is perfect, none will do away with the need of care; yet how many patients suffer by not knowing or disregarding this—by acting as if the climate would do the impossible, running risks and doing things which at home none but the healthy and strong would do, and such as an invalid should never attempt.

The question of going abroad is a very serious one. It involves the abandonment of the ordinary occupations and perhaps the loss even of the means of livelihood, the breaking up of the home and family it may be, and the expenditure of much money. This, therefore, is a question not to be lightly decided. It requires the greatest deliberation, and into it enter many considerations besides those which are purely medical. It is often a question of not what is the best in the abstract, but what is the best possible under the circumstances in which the patient is placed. In every case the question must be answered with a special reference to the individual concerned, and cannot be settled on general principles, for however true such principles may be in general they often lead to the gravest error in practice if applied indiscriminately and without special consideration to an individual case. Patients often go to a medical man expecting him to decide offhand. This is sometimes attempted, and not infrequently with lamentable results.

There are several questions to be answered before the right conclusion can be arrived at. 1. Is the patient in such a condition as to be likely to derive permanent benefit from a better climate than he has at home? 2. If he is fit to travel, how long a journey can he undertake, and what kind of travelling will be the best? 3. What are his means (for foreign residence is largely a question of money)? 4. How long can he stay away from home? 5. Who can go with him? 6. When shall he start and how shall he go? 7. What kind of place is likely to suit him best? 8. What is the patient's general character, and how will it be affected by living in a foreign country, with houses, customs, and food all strange to him? 9. How

can he occupy his time or amuse himself? 10. What effect will separation from home and family have upon him? 11. As regards the place, we must consider: (*a*) how far it will meet the various requirements already specified; (*b*) whether the patient is in a condition to derive full benefit from the advantage it offers; (*c*) the accommodation the place affords for an invalid in respect of housing, food, and general comforts; and (*d*) its accessibility, not only in respect of the journey out for the patient, but for the journey home should the patient decide to return, and especially with reference to the coming and going of friends, visits which go so far to make absence from home tolerable.

This is a long string of questions to be considered, but many others, too, of less importance will easily suggest themselves, and, small as many of them may seem to be, it is just upon such trifles as these that the whole comfort of the invalid depends and the success or failure of the sojourn abroad turns. All these questions must be considered carefully if wise advice is to be given. The medical adviser must, in fact, put himself in the patient's place and regard the question from his point of view, taking into consideration all these personal facts in the problem as well as the medical aspects of the case, and according as he does this or not will his advice be wise and beneficial or the reverse. The most disastrous mistakes are often made by sending patients abroad without careful thought—disastrous alike to the patient, to the family, and to the practitioner's own reputation. Even with every care the difficulties of a right decision are often enormous, but those who take most care will make fewest errors. The light and almost flippant way in which patients are sometimes advised to go abroad, with little or no regard to the special circumstances of each case, is often cruel in its results and cannot be too strongly reprobated.

If the patient is to benefit by a good climate his condition must be such that he may be able to take full advantage of it when he gets there. A patient, therefore, who is in the acute stages of disease, who is too ill to be up and spends all day in bed, is obviously not a case to send abroad, nor is he either fit to travel. He is best at home, where he can be carefully nursed and tended. Even if he is less ill than this and able to be up part of the day, though with a temperature above normal every day and with marked constitutional signs, he is best at home. In these respects the constitutional condition of the patient, rather than the physical signs, is our best guide. If, on the other hand, the temperature is not much raised and the strength fair, so that the patient may be a good deal out of doors every day when the weather permits, he may fairly be sent abroad. Of course, the most suitable cases of all are those in which the constitutional symptoms are entirely absent and the disease stationary, and this is true in any stage of the disease whatever the physical signs may be.

The next question is, What kind of a journey can the patient stand? This often limits greatly the choice of place. Some journeys are obviously out of the question on account of the exposure or fatigue they entail. If the journey is too long to be travelled right through at once it may be broken at convenient places. In some journeys, such as that to the Riviera, the arrangements are so well made for invalids that they can travel easily right through in comfortably warmed and ventilated carriages, but even such a journey as this is tiring and may be more than the patient can stand. If the journey be broken the breaks must be carefully timed and thought out, so that the patient may not be exposed at night, especially in chilly or cold weather. In this country, unfortunately, all journeys abroad involve crossing the sea, and there is nothing worse for invalids than waiting on draughty piers and in railway stations, on landing or going on board, when the day is cold and windy or at night time. In some instances a journey by ship all the way is an easier mode of travelling than by railway; still, the patient ought to be a good sailor and the weather promising. It can do no invalid good, whether a good sailor or not, to be under closed hatches for some days in a cabin or saloon which is poorly ventilated and perhaps shared with other invalids too; still, in good weather and on a good vessel travelling by steamer is one of the easiest and best modes of making a long journey.

Perhaps the most essential question is the means of the patient. Can he afford to be away from home some time without anxiety as to cost, to travel in every comfort as an invalid should, and to have every comfort in the place of destination in respect of housing, food, amusement, and attendance? To go abroad as an invalid is a very expensive business whatever be the place chosen and often involves an outlay of from £300 to £500. It is often better for the patient to be at home, surrounded by the usual comforts and occupations, than to be without them in a good climate, and to be able to afford only a second-rate accommodation, food, and attention, and to be obliged to economise in the small comforts and luxuries which could be provided at home. To be abroad and worried by such petty cares will undo all the good a good climate might do.

It is useless to send phthisical patients away for only a month or two. They should leave in October and not return until May or June. Of course, they need not stay in the same place all the time. They may, for instance, spend the autumn in Geneva or at the Italian lakes, and make their way to the Riviera as winter sets in, going up perhaps to the mountains as the heat of spring and summer comes on. At any rate, the whole winter must be spent away, and if the first proves a success possibly a second and a third. All this means money, and on this score the mind must be easy if the climate is to do good.

If the patient is a young man who is fairly active he may go abroad to settle and alone, but in other cases a companion will be needed, and the question is, Who else can go? Preferably, of course, some member of the family should be selected, for it is difficult to find a paid person who will at the same time be a good companion and an attentive and skilful nurse. Even from among the family it is not always easy to find a companion congenial to the patient. One of the great difficulties to be dealt with in arranging to send a patient abroad is the way in which it breaks up the home. If the mother is the patient she will have to take her daughter with her, perhaps the one who naturally would fill her place when she was away. Or if the daughter is sick and the mother has to go, she will have in most cases to leave her husband alone, whose profession or business makes it impossible for him to be long away from home.

Closely connected with the question of companionship is the character of the patient, whether he is of a cheerful and sociable disposition and inclined to make the best of what he even does not like, or whether he is morose and despondent, inclined to take a despairing view of most things and to magnify the discomforts of being away from home. Few persons like to be sent abroad for their health. Some may enjoy it if well enough; but these are generally young people with no special responsibilities or cares, to whom the novelty and change of life are full of interest. Most other persons look upon it as exile, and to those of a despondent nature home sickness and the petty discomforts and trials of foreign residence often make the life intolerable to them. Again, some occupation must be provided if the invalid is not to suffer from *ennui*, for time often hangs heavy on a sick man's hands. Open-air exercise and occupation are the best of all if the invalid is well enough to enjoy them; but if not so, it may often be difficult to keep the patient occupied and happy. It will also be necessary to consider what the effect will be upon the invalid of leaving home, family, and friends. Many patients feel and say that they would rather live a shorter time at home, with their family and friends about them, than a longer time abroad, separated from all that makes their life worth living. To banish a phthisical mother from her family and home is often cruel, and almost as often ineffectual, for the craving for home and the grief of separation produce more harm than the climate does good. Due allowance must be made for this personal question. A compromise may be sometimes made with advantage by choosing a place not too far away where the mother, for instance, may feel that if necessary her children could always come to her, or if need be she could go to them. The idea of absolute separation is sometimes unbearable, and the fear which some patients have lest they should die abroad not infrequently decides them against a foreign journey.

If these preliminary questions have all been satisfactorily answered we have next to consider what place will best fulfil the requirements, bearing in mind especially the kind of life the patient is likely to lead, whether he will be much out of doors and lead a more or less active life, or whether he is incapable of much exertion and must lead a more or less sedentary life when out of doors. In the latter case the place must be warm, but in the former it may be colder and more bracing. The idiosyncrasies of the individual again

must not be forgotten. It will be well to ascertain what kind of place has hitherto suited him best, whether a high or low place, a hot or cold place, a bracing or a moist and more relaxing air. Speaking generally, phthisical patients are best in a warm but not hot place fairly high up and with a more or less bracing air; at any rate, great heat and great moisture do not suit most.

With respect to the place especial consideration must be given to its accessibility and to the accommodation available. In regard to accessibility we have to consider, not only the distance of the place and the time it takes to reach it, but also the means of travelling thither. Some places comparatively near, like Davos, are more troublesome to get to—at any rate, at certain times of the year—than those further away, like Madeira. There is also to be considered the ease with which the patient's friends and relatives can make the journey to and fro, and the facility offered for the patient's return home if it should be necessary. Nervous patients often object strongly to the feeling of being locked up in a place from which they could hardly move, even if it were necessary, until the winter was over. The accommodation is also an important factor, for some excellent climates are quite unavailable for the want of such hotels or dwellings and such cooking or comforts as an invalid must have. For these local details local knowledge is necessary, and it is well for patients to put themselves into relation with the medical man of the place as soon as they arrive, so that they may obtain the best advice as to the part of the town to live in and the actual lodgings and rooms available. A great deal turns on these points, and the information can only be supplied by a resident in the place with the necessary knowledge.

If it is settled that the patient shall go abroad he must leave the country before the bad weather sets in—that is, before November—and must time his journey so that he reaches his destination at the right season and is not exposed on the way to great extremes of temperature; for instance, if he were going to Australia in October he would not go through the Suez Canal and Red Sea, but would take the voyage round by the Cape, or if going to Davos he would arrange to get there before the winter had set in.

The places recommended as winter resorts for phthisis differ so much from one another in respect of climate that it is difficult to see what they have in common, yet good results are obtained in suitable cases with all alike. Statistical statements are most unreliable—first, because of the smallness of the numbers dealt with, and, secondly, because there is no guarantee that the cases in each group are really patients in the same stage or condition of the disease so as to admit of fair comparison *inter se*. The only requisite which it appears every suitable climate possesses is that it should be such as to admit of the patient being as much in the open air and sunlight as possible. Wherever a patient can spend all day out of doors, and when indoors can still live in a pure atmosphere, phthisical patients will do well; and I have little doubt that, with the same precautions and subject to the same *régime* that phthisical patients voluntarily submit to abroad, they might easily live and benefit in many places at home in spite of our cold winds, moist air, and comparative want of sun in winter.

I may conclude, much as I began, by stating that in this question of wintering abroad we have to decide not what is best in the abstract for phthisical patients in general, but what is the best possible under the circumstances for a particular case. What these circumstances are will take time and trouble to investigate, but they are the prime factors in the problem. To come to the right conclusion in any given case requires some knowledge and experience, much care and trouble, and, most of all, sympathy and common sense.

Wimpole-street, W.

BRITISH COLLEGE OF PHYSICAL EDUCATION.—A meeting of the governors of the British College of Physical Education was held at the office of the college, 33, Lancaster-gate, on Saturday last, when it was decided that the college should be incorporated under the regulations of the Board of Trade, that no members or licentiates should be admitted to the college without examination after Jan. 1st, 1896, and that the next half-yearly examination should be held at the People's Palace on Saturday, Nov. 30th. A subcommitte was appointed to suggest the names of eminent men to lecture on physical education.

A CASE OF TRAUMATIC TETANUS TREATED WITH TETANUS ANTITOXIN; RECOVERY.

BY NESTOR I. C. TIRARD, M.D., F.R.C.P. LOND.,
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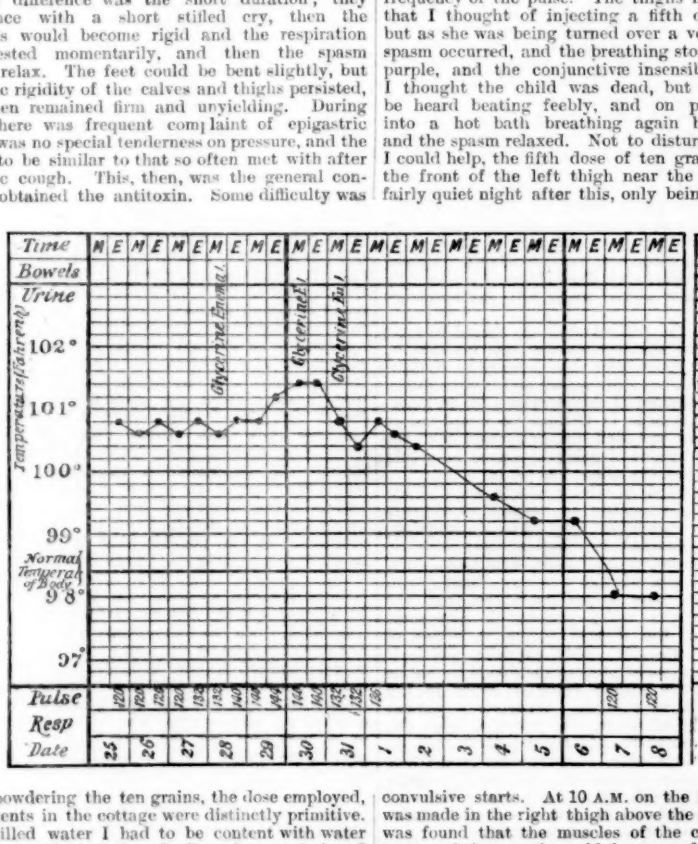
DURING my vacation in Arran I heard incidentally on a Sunday morning (Aug. 25th last) of a case of "blood poisoning" after an injury to the foot. I was told that the patient was the daughter of a butcher at Corrie, and had already been seen by two medical men, who had given a fatal prognosis. When passing the house later in the day I was hastily summoned, and found the child, a girl aged four years and a half, in a state of opisthotonos, the lips blue, the face cyanosed, the eyes turned upwards, and the conjunctivæ insensible. I could not detect any pulse at the wrist, and respiration was arrested; on listening over the heart, however, feeble, slow pulsations were heard. Under the influence of a hot bath respiration gradually recommenced, the appearance improved, and the pulse gained in frequency and in force. The spasm of muscles relaxed to a moderate extent only, the legs remained extended, and the muscles of the calf and thigh were rigid; the muscles of the upper limbs were also firm, but the hands could be moved slightly. The muscles of the abdomen were in strong contraction, the recti being prominent. Respiration appeared to be effected entirely by the intercostals, but the movements of the diaphragm (if any) may have been masked by the condition of the abdominal walls. When the immediate anxiety about the patient was somewhat relieved I learnt that, in running about with bare feet, she had cut her left foot badly about a fortnight before, there had been a great deal of hæmorrhage, and the mother had succeeded in extracting a piece of glass, which she thought was part of a broken jelly jar. The foot had been bound up and had been thought to be healing nicely for a week, and then lost its healthy look and did not progress. It was possible that in the interim the child might have played in the slaughter-house or in the adjoining stables. During Aug. 20th, 21st, and 22nd she had not been as cheerful as usual, she had lost appetite and had been much quieter, but no medical man was sought until Aug. 23rd, when she had a succession of severe convulsions. She was then seen by Dr. Neil Fullarton of Lamlash, who at once recognised the case as undoubtedly one of tetanus and ordered the foot to be poulticed. He also commenced treatment with six grains of chloral hydrate every four hours, and a chlorate of potash gargle was tried, as the tongue appeared to be very sore, but the child refused to employ this, so glycerinum boracis was substituted. Between the 23rd and the 25th she had numerous severe convulsions and was seen by a German medical man staying a few days in Corrie, who agreed with the diagnosis. Much difficulty had been experienced in attempting to induce her to take the chloral; the violent convulsion which I witnessed was attributed to the excitement of endeavouring to persuade her to take it from a spoon. The mother showed me the injured foot; there was a deep cut nearly three inches long, extending transversely across the inner side and sole of the foot about an inch behind the big toe; the wound was granulating and looked fairly healthy, and no foreign substance could be detected with a probe. There was no tenderness or swelling along the course of the lymphatics. I left a note for Dr. Fullarton, who lived ten miles off, explaining the circumstances of my examination of his patient, and on my way homewards telegraphed to my friend Dr. Hewlett at the British Institute of Preventive Medicine for some tetanus antitoxin. Through the kind help of Mr. James Coats, who placed his steam yacht at my disposal, I was able to obtain and employ the antitoxin within twelve hours from the time it left London. During this interval there had been three severe convulsive spasms, none of them so alarming as the one I had first seen, but the general condition remained very much the same. The child was conscious and could speak in short sentences, not using more than three or four words, and then only to call for milk, or water, or to beg to be taken up or else

put back to bed. She was extremely restless and fractious. The mouth was drawn up at the angles, the masseters being firm and rigid; the jaws could not be voluntarily opened beyond a third of an inch, and through the aperture the tongue could be seen to be much marked by the teeth and with an aphthous white membrane over the upper surface and yellowish sloughy patches on the lower. At the time of the convulsive spasms the jaws were always firmly clenched, and the tongue appeared to be driven forwards against the teeth. So far as I could ascertain the tongue had not been bitten; its condition resulted from the damage done by pressure in the course of convulsion. In addition to the three severe convulsive spasms above mentioned there had been very numerous little "starts" in which the only difference was the short duration; they would commence with a short stifled cry, then the body and limbs would become rigid and the respiration would be arrested momentarily, and then the spasm would partially relax. The feet could be bent slightly, but the general tonic rigidity of the calves and thighs persisted, and the abdomen remained firm and unyielding. During the intervals there was frequent complaint of epigastric pain, but there was no special tenderness on pressure, and the pain appeared to be similar to that so often met with after severe spasmodic cough. This, then, was the general condition when I obtained the antitoxin. Some difficulty was


Time
Bowels
Urine
Temperature (Fahrenheit)
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101°
100°
99°
Normal Temperature of Body
98°
97°
Glycerine Enema!
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experienced in powdering the ten grains, the dose employed, as the arrangements in the cottage were distinctly primitive. In place of distilled water I had to be content with water which had been freshly boiled and allowed to cool, but I found that prolonged patient stirring was needed to dissolve the ten grains in a fluid drachm of water, and then, having only an ordinary hypodermic syringe at hand, the dose was injected under the skin of the front of the left thigh, the needle being kept in position while the syringe was refilled. Beyond the momentary pain with the first insertion of the needle, the injection of this quantity of fluid gave very little discomfort, the resulting swelling speedily becoming somewhat reduced in size. The first injection was made at 11 P.M. on Monday, Aug. 26th, and the condition of the child remained very much the same during the night. At 2 A.M. she had an opisthotonic convulsion and another at 4 A.M., but according to the mother's account these, though bad, were not as severe as the convulsions she had had the previous day. At 10 A.M. on the 27th a second dose of ten grains was injected high up on the right thigh; there had been no material change in the temperature, but the child was perspiring profusely about the head, neck, and thorax. The pulse was still of good quality, and nourishment was well maintained by milk, which was frequently asked for. The day passed quietly enough, though the slight "starts" were frequent and the tonic spasm had not materially relaxed. A third injection of ten grains was made in the left thigh at 8 P.M. on the night of the 27th. The child was very restless during the night, constantly asking to be taken up and frightened if her mother left her for a moment. At 6 A.M. and at 8 A.M. she had convulsive attacks, but these did not last long. At 10 A.M. on the 28th a fourth injection of ten grains was made in the right thigh. The sites of the former injections were still swollen and discoloured like bruises; they were also somewhat tender. A glycerine enema produced a slight motion. During the day the child appeared to be much better and brighter, and when I saw her at 7 P.M. the only unfavourable sign (as compared with previous days) was an increased frequency of the pulse. The thighs now looked so swollen that I thought of injecting a fifth dose into the buttock, but as she was being turned over a very severe opisthotonic spasm occurred, and the breathing stopped, the lips became purple, and the conjunctivæ insensible; for the moment I thought the child was dead, but the heart could still be heard beating feebly, and on putting her hurriedly into a hot bath breathing again became re-established and the spasm relaxed. Not to disturb the child more than I could help, the fifth dose of ten grains was injected into the front of the left thigh near the knee. She passed a fairly quiet night after this, only being disturbed by slight convulsive starts. At 10 A.M. on the 29th a sixth injection was made in the right thigh above the knee. At this time it was found that the muscles of the calves were much less tense and the mouth could be opened a little more. Slight spasmodic starts occurred during the day, and when seen at night she was found to be covered with numerous sudamina, some reddened, giving the appearance of a punctate rash. She complained of much irritation about the forehead and scalp. The temperature was 101·2° F., the pulse 144 and more feeble. Whisky in half-drachm doses was accordingly given at intervals with the milk. On the morning of the 30th the temperature was 101·4° and the pulse was still feeble. A glycerine enema produced a copious motion, pale and formed. Patches of urticaria were found on the thighs in the neighbourhood of the injections, but the swellings had almost entirely subsided and only one of the sites of injection retained a bruised discolouration. On the morning of the 31st, at 6 A.M., a slight opisthotonic spasm occurred, but when seen at 10 A.M. the calves and thighs were much more flexible, and although the masseters could still be felt as firm bands there was not so much distortion of the features. The abdominal wall remained tense, and there was much complaint of pain over the epigastrium. Another glycerine enema again resulted in a copious evacuation. During the day there was much trouble with mucus in the mouth, which was ejected with blowing efforts. The accumulations of mucus gave much

distress, and several slight starts occurred after efforts at expulsion. During the afternoon the child appeared much easier, holding a feather in her hands and playing with it. The limbs were not so rigid; she could draw up the thighs in bed. She slept at intervals and was noticing more. The evening temperature was 100·4°. On Sept. 1st there was still much mucus coming from the mouth, and occasionally this was blood-tinged. The child slept during the greater part of the day, sometimes waking with a convulsive start, but going to sleep again almost at once. On Sept 2nd her condition had much improved, but she was still troubled with mucus. The temperature was 100·4°. On Sept. 4th the temperature had fallen to 99·6°. Much blood came from the mouth with the mucus. She played with her toys, but did not talk. During sleep the mouth had been much more open, and the pained look had left her face. On Sept. 5th after a quiet morning she had a slight opisthotonic spasm on being suddenly startled. The temperature had fallen to 99·2° and the pulse had gained in volume. Later in the day she talked to her brothers and played. The abdominal muscles were still somewhat rigid. She could turn in bed. During the night of Sept. 6th she had a slight spasm, in which she seemed to be in pain, but she went to sleep almost immediately afterwards. A similar slight spasm occurred on the afternoon of the 7th, but the temperature was then only 98°. I examined her for the last time on the evening of the 8th, and although not completely healed the wound in the foot was much smaller and looked healthy, and although there was much sense of resistance over the epigastrium there was no complaint of tenderness. She could move freely in bed, and when seated on her mother's knee her legs hung down freely, with bent knees and flaccid calves, but she was unable to sit up unaided. I considered her convalescent and returned to town, convinced that it would be only a few days before I should hear of complete restoration to health. On Sept. 10th the mother wrote that the patient "is getting on nicely; she can sit on my knee to-day without any support ..... she has not been one bit stiff to-day." On Sept. 12th she wrote that she "is still improving; I see such a difference in her every day; she takes little spasms yet, but they don't last any time, and she does not get stiff under the knee. ..... When I was lifting her out of the bed she put her arms round my neck and lifted herself up till she stood on her one foot." On Sept. 16th she said the patient "is able now to lie on either side and sit alone in bed. ..... She only cried twice with pain during the night; she has not any pain during the day." On Sept. 19th she further wrote: "She is able now to creep on her knees from one end of the sofa to the other; she can turn herself any way. ..... The skin has come off her hands, feet, knees, part of her body, and behind her ears." Finally, on Oct. 2nd, she wrote saying that she "can walk alone now, but she is still lame. I do not know whether the lameness is from weakness or that she is afraid to bend the sole of her foot. The foot is quite healed up, but it seems to be tender. She has no pains in her stomach nor anywhere else. ..... There is no twitching of any kind. ..... She plays with the others and is as bright as any of them."

Remarks.—The points of especial interest in this case are the following:—1. The proximity of stable and slaughter-house, which afforded possible sources of contamination of the wound. 2. The readiness with which milk was taken throughout the course of the illness. 3. The degree of spasm of the abdominal and respiratory muscles; this gave rise to the urgent symptoms quite at the beginning and also constituted the chief feature during the later stages; tonic and spasmodic contractions of these muscles persisted long after the muscles of the limbs had become flaccid. 4. The amount of mucus and blood coming from the mouth. Although the tongue was obviously sore and injured quite early in the case, this over-secretion of mucus only became manifest some days after the antitoxin had been used. 5. The excessive perspiration and the sudamina also were only noted after the antitoxin. 6. The severity of the convulsions as well as the frequency became much reduced after the antitoxin, though one of the worst attacks occurred on the 28th. The slight rise of temperature may have been due to the antitoxin; the urticaria was certainly, I think, a direct result. While it is extremely difficult to speak with certainty about the benefit of the antitoxin, I can only say that when I first saw the child I fully anticipated a speedy fatal termination, and this view was shared by two other medical men who saw her. Whenever we attempted to give medicines by the mouth so much excitement resulted that we had to desist. Certainly after the antitoxin the child was more peaceful, and the severity of the opisthotonic spasms was less.

Harley-street, W.

HEART FUNCTION AND PELVIC LESIONS IN THE FEMALE.[1]

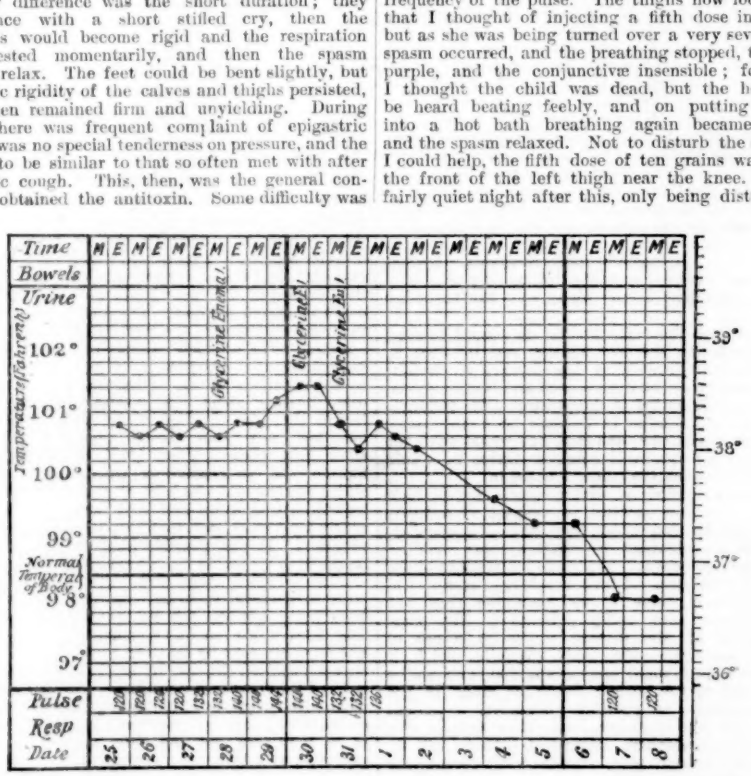
BY JOHN D. WILLIAMS, M.D. EDIN., B.SC.,
FREELAND-BARBOUR FELLOW OF THE UNIVERSITY OF EDINBURGH, 1888-90; LATE DEMONSTRATOR OF ANATOMY, SCHOOL OF MEDICINE, AND LATE PATHOLOGICAL ASSISTANT TO THE PROFESSOR OF MIDWIFERY OF THE UNIVERSITY OF EDINBURGH.

I WISH to confine my remarks, which will be brief, entirely to the so-called "functional" heart disorders. Of a little over 300 women whose hearts and pelvic organs I have examined during the last six years, and of whose cases I have accurate records in my possession, I have been able to gather twenty-five cases in which functional heart disorders were found clinically to coexist with obvious abnormal conditions in the pelvis. No case is included in these twenty-five in which there was a previous history of rheumatic fever or in which there existed organic valvular disease. Pregnancy and obvious hæmic conditions, such as are produced by profuse leucorrhœal discharges and abnormal uterine hæmorrhages from various causes, have also been carefully excluded. A careful analysis of the symptoms and clinical history of the twenty-five cases shows at a glance that the majority of the patients sought relief for troublesome symptoms referred directly to the heart, but it also indicates a minority who complained primarily of distress in the region of the pelvis. Some believed themselves to be the victims of heart disease from the construction which they themselves placed upon reflex submammary pain associated with a sense of throbbing or palpitation over the præcordium. Their ages ranged from seventeen to forty years. No case where the woman was above forty years of age is classified, in order to avoid the influences of the menopause. I shall not give a detailed account of each patient; it will be sufficient for my purpose to speak of them in groups arranged according to the particular pelvic organ affected.

Lesions of the uterus.—Of the twenty-five cases the uterus was affected in eleven instances. Eight of the eleven were patients in whom the uterus was displaced either backwards, forwards, or downwards. All these were married, and all except one, who was sterile, had borne several children. One of the eleven was a case of a rapidly growing abdominal uterine fibroid in a single woman aged twenty-eight years who had been under observation for two years. There was never any metrorrhagia, and but slight menorrhagia. The remaining two are cases of slowly growing pelvic uterine fibroids in women nearing the age of forty who complained of no pelvic symptoms of any kind and who were quite ignorant of their existence. All these women, however, suffered more or less acutely from symptoms and disturbances directly traceable to the heart in the form either of palpitation, throbbing, giddiness, pain and uneasiness over the præcordium separately, or of a combination of all. In some of the cases the heart's action was intermittent and in others it was irregular, the irregularity manifesting itself in a variation in the strength of the beat or in the time of the beat, and sometimes in a combination of both. In one of the cases of slowly growing pelvic fibroids—that of a married woman aged forty years—the nature of the cardiac derangement was very interesting. For ten, twenty, thirty, forty, and even fifty beats or more the heart's action was hurried. This hurried period was followed by a slow interval during which the cardiac beats were comparatively infrequent. These waves of hurried and slow action alternated, and in order to detect them it was found necessary to watch the pulse for several minutes. Also in this particular case variations in the blood pressure were observed to occur; for from one to three minutes the tension was high, and then there ensued a period during which the tension was low, which continued rather longer than the high-tensioned periods. These periods recurred in regular sequence. Such a pulse I have since occasionally met with

[1] Read before the South Wales and Monmouthshire Branch of the British Medical Association, February, 1895.

put back to bed. She was extremely restless and fractious. The mouth was drawn up at the angles, the masseters being firm and rigid; the jaws could not be voluntarily opened beyond a third of an inch, and through the aperture the tongue could be seen to be much marked by the teeth and with an aphthous white membrane over the upper surface and yellowish sloughy patches on the lower. At the time of the convulsive spasms the jaws were always firmly clenched, and the tongue appeared to be driven forwards against the teeth. So far as I could ascertain the tongue had not been bitten; its condition resulted from the damage done by pressure in the course of convulsion. In addition to the three severe convulsive spasms above mentioned there had been very numerous little "starts" in which the only difference was the short duration; they would commence with a short stifled cry, then the body and limbs would become rigid and the respiration would be arrested momentarily, and then the spasm would partially relax. The feet could be bent slightly, but the general tonic rigidity of the calves and thighs persisted, and the abdomen remained firm and unyielding. During the intervals there was frequent complaint of epigastric pain, but there was no special tenderness on pressure, and the pain appeared to be similar to that so often met with after severe spasmodic cough. This, then, was the general condition when I obtained the antitoxin. Some difficulty was slight "starts" were frequent and the tonic spasm had not materially relaxed. A third injection of ten grains was made in the left thigh at 8 P.M. on the night of the 27th. The child was very restless during the night, constantly asking to be taken up and frightened if her mother left her for a moment. At 6 A.M. and at 8 A.M. she had convulsive attacks, but these did not last long. At 10 A.M. on the 28th a fourth injection of ten grains was made in the right thigh. The sites of the former injections were still swollen and discoloured like bruises; they were also somewhat tender. A glycerine enema produced a slight motion. During the day the child appeared to be much better and brighter, and when I saw her at 7 P.M. the only unfavourable sign (as compared with previous days) was an increased frequency of the pulse. The thighs now looked so swollen that I thought of injecting a fifth dose into the buttock, but as she was being turned over a very severe opisthotonic spasm occurred, and the breathing stopped, the lips became purple, and the conjunctivæ insensible; for the moment I thought the child was dead, but the heart could still be heard beating feebly, and on putting her hurriedly into a hot bath breathing again became re-established and the spasm relaxed. Not to disturb the child more than I could help, the fifth dose of ten grains was injected into the front of the left thigh near the knee. She passed a fairly quiet night after this, only being disturbed by slight



experienced in powdering the ten grains, the dose employed, as the arrangements in the cottage were distinctly primitive. In place of distilled water I had to be content with water which had been freshly boiled and allowed to cool, but I found that prolonged patient stirring was needed to dissolve the ten grains in a fluid drachm of water, and then, having only an ordinary hypodermic syringe at hand, the dose was injected under the skin of the front of the left thigh, the needle being kept in position while the syringe was refilled. Beyond the momentary pain with the first insertion of the needle, the injection of this quantity of fluid gave very little discomfort, the resulting swelling speedily becoming somewhat reduced in size. The first injection was made at 11 P.M. on Monday, Aug. 26th, and the condition of the child remained very much the same during the night. At 2 A.M. she had an opisthotonic convulsion and another at 4 A.M., but according to the mother's account these, though bad, were not as severe as the convulsions she had had the previous day. At 10 A.M. on the 27th a second dose of ten grains was injected high up on the right thigh; there had been no material change in the temperature, but the child was perspiring profusely about the head, neck, and thorax. The pulse was still of good quality, and nourishment was well maintained by milk, which was frequently asked for. The day passed quietly enough, though the convulsive starts. At 10 A.M. on the 29th a sixth injection was made in the right thigh above the knee. At this time it was found that the muscles of the calves were much less tense and the mouth could be opened a little more. Slight spasmodic starts occurred during the day, and when seen at night she was found to be covered with numerous sudamina, some reddened, giving the appearance of a punctate rash. She complained of much irritation about the forehead and scalp. The temperature was 101·2°F., the pulse 144 and more feeble. Whisky in half-drachm doses was accordingly given at intervals with the milk. On the morning of the 30th the temperature was 101·4° and the pulse was still feeble. A glycerine enema produced a copious motion, pale and formed. Patches of urticaria were found on the thighs in the neighbourhood of the injections, but the swellings had almost entirely subsided and only one of the sites of injection retained a bruised discolouration. On the morning of the 31st, at 6 A.M., a slight opisthotonic spasm occurred, but when seen at 10 A.M. the calves and thighs were much more flexible, and although the masseters could still be felt as firm bands there was not so much distortion of the features. The abdominal wall remained tense, and there was much complaint of pain over the epigastrium. Another glycerine enema again resulted in a copious evacuation. During the day there was much trouble with mucus in the mouth, which was ejected with blowing efforts. The accumulations of mucus gave much

distress, and several slight starts occurred after efforts at expulsion. During the afternoon the child appeared much easier, holding a feather in her hands and playing with it. The limbs were not so rigid; she could draw up the thighs in bed. She slept at intervals and was noticing more. The evening temperature was 100·4°. On Sept. 1st there was still much mucus coming from the mouth, and occasionally this was blood-tinged. The child slept during the greater part of the day, sometimes waking with a convulsive start, but going to sleep again almost at once. On Sept. 2nd her condition had much improved, but she was still troubled with mucus. The temperature was 100·4°. On Sept. 4th the temperature had fallen to 99·6°. Much blood came from the mouth with the mucus. She played with her toys, but did not talk. During sleep the mouth had been much more open, and the pained look had left her face. On Sept. 5th after a quiet morning she had a slight opisthotonic spasm on being suddenly startled. The temperature had fallen to 99·2° and the pulse had gained in volume. Later in the day she talked to her brothers and played. The abdominal muscles were still somewhat rigid. She could turn in bed. During the night of Sept. 6th she had a slight spasm, in which she seemed to be in pain, but she went to sleep almost immediately afterwards. A similar slight spasm occurred on the afternoon of the 7th, but the temperature was then only 98°. I examined her for the last time on the evening of the 8th, and although not completely healed the wound in the foot was much smaller and looked healthy, and although there was much sense of resistance over the epigastrium there was no complaint of tenderness. She could move freely in bed, and when seated on her mother's knee her legs hung down freely, with bent knees and flaccid calves, but she was unable to sit up unaided. I considered her convalescent and returned to town, convinced that it would be only a few days before I should hear of complete restoration to health. On Sept. 10th the mother wrote that the patient "is getting on nicely; she can sit on my knee to-day without any support ..... she has not been one bit stiff to-day." On Sept. 12th she wrote that she "is still improving; I see such a difference in her every day; she takes little spasms yet, but they don't last any time, and she does not get stiff under the knee. ..... When I was lifting her out of the bed she put her arms round my neck and lifted herself up till she stood on her one foot." On Sept. 16th she said the patient "is able now to lie on either side and sit alone in bed. ..... She only cried twice with pain during the night; she has not any pain during the day." On Sept. 19th she further wrote: "She is able now to creep on her knees from one end of the sofa to the other; she can turn herself any way. ..... The skin has come off her hands, feet, knees, part of her body, and behind her ears." Finally, on Oct. 2nd, she wrote saying that she "can walk alone now, but she is still lame. I do not know whether the lameness is from weakness or that she is afraid to bend the sole of her foot. The foot is quite healed up, but it seems to be tender. She has no pains in her stomach nor anywhere else. ..... There is no twitching of any kind. ..... She plays with the others and is as bright as any of them."

Remarks.—The points of especial interest in this case are the following:—1. The proximity of stable and slaughter-house, which afforded possible sources of contamination of the wound. 2. The readiness with which milk was taken throughout the course of the illness. 3. The degree of spasm of the abdominal and respiratory muscles; this gave rise to the urgent symptoms quite at the beginning and also constituted the chief feature during the later stages; tonic and spasmodic contractions of these muscles persisted long after the muscles of the limbs had become flaccid. 4. The amount of mucus and blood coming from the mouth. Although the tongue was obviously sore and injured quite early in the case, this over-secretion of mucus only became manifest some days after the antitoxin had been used. 5. The excessive perspiration and the sudamina also were only noted after the antitoxin. 6. The severity of the convulsions as well as the frequency became much reduced after the antitoxin, though one of the worst attacks occurred on the 28th. The slight rise of temperature may have been due to the antitoxin; the urticaria was certainly, I think, a direct result. While it is extremely difficult to speak with certainty about the benefit of the antitoxin, I can only say that when I first saw the child I fully anticipated a speedy fatal termination, and this view was shared by two other medical men who saw her. Whenever we attempted to give medicines by the mouth so much excitement resulted that we had to desist. Certainly after the antitoxin the child was more peaceful, and the severity of the opisthotonic spasms was less.

Harley-street, W.

HEART FUNCTION AND PELVIC LESIONS IN THE FEMALE.[1]

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I WISH to confine my remarks, which will be brief, entirely to the so-called "functional" heart disorders. Of a little over 300 women whose hearts and pelvic organs I have examined during the last six years, and of whose cases I have accurate records in my possession, I have been able to gather twenty-five cases in which functional heart disorders were found clinically to coexist with obvious abnormal conditions in the pelvis. No case is included in these twenty-five in which there was a previous history of rheumatic fever or in which there existed organic valvular disease. Pregnancy and obvious hæmic conditions, such as are produced by profuse leucorrhœal discharges and abnormal uterine hæmorrhages from various causes, have also been carefully excluded. A careful analysis of the symptoms and clinical history of the twenty-five cases shows at a glance that the majority of the patients sought relief for troublesome symptoms referred directly to the heart, but it also indicates a minority who complained primarily of distress in the region of the pelvis. Some believed themselves to be the victims of heart disease from the construction which they themselves placed upon reflex submammary pain associated with a sense of throbbing or palpitation over the præcordium. Their ages ranged from seventeen to forty years. No case where the woman was above forty years of age is classified, in order to avoid the influences of the menopause. I shall not give a detailed account of each patient; it will be sufficient for my purpose to speak of them in groups arranged according to the particular pelvic organ affected.

Lesions of the uterus.—Of the twenty-five cases the uterus was affected in eleven instances. Eight of the eleven were patients in whom the uterus was displaced either backwards, forwards, or downwards. All these were married, and all except one, who was sterile, had borne several children. One of the eleven was a case of a rapidly growing abdominal uterine fibroid in a single woman aged twenty-eight years who had been under observation for two years. There was never any metrorrhagia, and but slight menorrhagia. The remaining two are cases of slowly growing pelvic uterine fibroids in women nearing the age of forty who complained of no pelvic symptoms of any kind and who were quite ignorant of their existence. All these women, however, suffered more or less acutely from symptoms and disturbances directly traceable to the heart in the form either of palpitation, throbbing, giddiness, pain and uneasiness over the præcordium separately, or of a combination of all. In some of the cases the heart's action was intermittent and in others it was irregular, the irregularity manifesting itself in a variation in the strength of the beat or in the time of the beat, and sometimes in a combination of both. In one of the cases of slowly growing pelvic fibroids—that of a married woman aged forty years—the nature of the cardiac derangement was very interesting. For ten, twenty, thirty, forty, and even fifty beats or more the heart's action was hurried. This hurried period was followed by a slow interval during which the cardiac beats were comparatively infrequent. These waves of hurried and slow action alternated, and in order to detect them it was found necessary to watch the pulse for several minutes. Also in this particular case variations in the blood pressure were observed to occur; for from one to three minutes the tension was high, and then there ensued a period during which the tension was low, which continued rather longer than the high-tensioned periods. These periods recurred in regular sequence. Such a pulse I have since occasionally met with

[1] Read before the South Wales and Monmouthshire Branch of the British Medical Association, February, 1895.

in women at the menopause. Whenever this patient rose suddenly from her bed or chair or abruptly turned round she was seized with giddiness, which lasted two or three minutes. Appropriate treatment, directed towards improving the position of the uterus, effected a complete cure of all heart troubles in five out of the eight cases of displacement already referred to. The three cases that did not improve were: (1) a married woman aged thirty-five years, sterile and suffering from pathological anteflexion of the uterus, with stenosis of the cervix and pin-point os; (2) another patient aged forty years, suffering from dysmenorrhœa and retroflexion; and (3) a woman aged forty years, suffering from prolapsus uteri, with multiple fissures of the cervix. Hysterectomy relieved the case of abdominal fibroid. The two cases of pelvic fibroids still remain unrelieved.

Lesions of the cervix uteri.—Two of the twenty-five cases were instances of stenosis of the cervix. One occurred in a robust, full-blooded girl aged seventeen years who had never menstruated and was suffering from severe face-ache, abdominal pains, and pains in the thighs, which lasted about five or six days and recurred once a month. At the same time she suffered from heart hurry and giddiness. I tried all kinds of medicinal treatment for fully six months, but to no purpose. Eventually I felt compelled to make a pelvic examination, when I discovered stenosis of the cervix. Subsequently the cervix was gradually dilated under anæsthesia, with the result that a few weeks later she menstruated for the first time, and without heart trouble. The other was a case of a sterile married woman aged twenty-nine years who was troubled with dysmenorrhœa, cervical stenosis, and menstrual headache and giddiness. Dilatation afforded no relief.

Lesions of the ovaries.—In six patients, all of whom were married and had borne children, one only being sterile, the lesion was ovarian. Inflammation and prolapse of one or both ovaries existed in five instances, the sixth being a case of a large-sized unilocular cyst growing from the hilum of the right ovary. Attention to the inflamed prolapsed ovaries and removal of the cyst allowed the heart's action to return to normal.

Lesions of the vagina.—A case occurred in a sterile, nervous married woman aged twenty-eight years who suffered from vaginismus, facial neuralgia, cardialgia, and severe palpitation. A lengthened but futile course of medicinal treatment was adopted. At last she consented to be anæsthetised and to have the ostium vaginæ forcibly dilated and cauterised with pure carbolic acid. This procedure was twice repeated. At the end of three months she was cured of all her bad symptoms.

Lesions of the rectum and anus.—Two married women, aged thirty and forty years respectively, the younger being sterile, were troubled with palpitation and a sense of uneasiness over the præcordium. The heart's action was irregular in time and strength, and there was an occasional abortive beat. They had for months suffered excruciating pain during and after defecation. Their suffering was due to a fissure. Surgical treatment under anæsthesia speedily cured the condition and effected in the course of a few months a complete restoration of health and strength and an absence of all cardiac trouble.

The remaining three cases of the twenty-five are as follows. 1. That of a multiparous married woman aged forty years who contracted influenza and three days later, when the fever was at its height, pelvic peritonitis. She was under treatment for six weeks and ultimately was quite relieved of her peritonitis, but she found after her convalescence was over that she became out of breath on the least exertion. On examining her heart I was astonished to find it beating at the rate of 120 per minute. I tried all sorts of remedies, but my endeavours were of no avail. She still suffers from tachycardia. Probably the influenza was the cause of both the pelvic and heart affection in this case. 2. That of a multiparous married woman aged twenty-five years troubled with pain in the lower part of the coccyx, inability to sit except by resting on one or other hip, painful defecation, tenderness and a sense of oppression over the præcordium, and palpitation and irregularity of the heart's action. When the local lesion was relieved her general health rapidly improved and the cardiac symptoms disappeared. 3. That of a married woman aged forty years suffering from a floating kidney and occasional attacks of giddiness and palpitation, with intermittent heart action. Strictly speaking, this ought not to find a place in the list, but still the wandering kidney may be regarded as simulating the influence of an abdominal tumour springing from the pelvis. No treatment was adopted beyond the use of an abdominal belt as the next best thing to nephrorrhaphy, and the cardiac symptoms are still unrelieved.

From the brief analysis above given, and I fear very imperfectly, it is clear, first, that relief has been afforded to the heart sufferings of seventeen women out of twenty-five in whom functional cardiac disorders coexisted with obvious pelvic and abdominal lesions; secondly, that this relief was afforded through directing attention to, treating, and curing the local lesion; and, thirdly, that some of the women here referred to sought medical advice under the firm impression that they were suffering from heart disease, and would hardly allow any reference to the pelvic organs as the seat of their complaint. As my chief object in writing this communication has been an honest endeavour to record accurately and faithfully the cases as they came under my observation, I shall not indulge in speculations or theories as to the possible modes by which diseased or displaced pelvic organs may influence the heart and the cardio-vascular system. That organic and functional cardiac diseases and pelvic lesions do coexist in the female in a moderately high ratio is an acknowledged fact. It is also recognised that the disturbances of the circulation in middle-aged women constitute a very considerable group of the functional disorders of the heart met with, at any rate in Great Britain and Germany.[2] In a previously published paper,[3] embodying the results of post-mortem investigations conducted by myself at the Edinburgh Royal Infirmary as to the frequency of the co-existence of valvular heart disease and pelvic lesions in the female, I have shown that organic cardiac disease is more frequently met with in women than in men, and that one of the chief differences of organic valvular disease of the heart in its relation to the two sexes is the great predominance in the female of mitral stenosis, and in the male of aortic incompetence, over all other cardiac lesions. The masterly and life-long researches of Sturges[4] into the heart affections in childhood show that cardiac disease is more often met with in young girls than in boys. Just as the metaphysical heart is more often accessible to a state of disturbance in the fair than in the sterner sex, so also its physical analogue, it is probable, is more frequently the seat of disease.

Cardiff, S. Wales.

FATAL ACUTE POISONING BY COCAINE.

BY O. H. GARLAND, M.D., F.R.C.P. EDIN.,
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THE following case is, I venture to think, of sufficient medico-legal interest to be recorded.

About 3.30 P.M. on Monday, Oct. 7th, 1895, at the request of the authorities, I made a superficial examination of the body of a young woman who had at about 7 A.M. swallowed for the relief of toothache upwards of two drachms of a ten per cent. solution of the hydrochlorate of cocaine, the equivalent of twelve to fifteen grains of the alkaloid. She had almost immediately afterwards suffered from vertigo, followed by epileptiform convulsions, nine in number, occurring in somewhat quick succession, and died within forty minutes. She appeared to be about seventeen years of age, and the body was well nourished. The trunk still retained a considerable degree of warmth, but the extremities were cold, rigor mortis being well developed in all of them. The face, lips, and anterior surface of the body were very pallid and waxlike, while on the dependent portions well-marked cutaneous hypostasis was present. The expression of countenance was placid. The pupils were dilated, and the conjunctivæ were not injected. The teeth were firmly clenched. On the following day (Tuesday), as further instructed, I made a post-mortem examination. The external appearances remained as described. Frothy mucus, slightly blood-stained, was freely exuding from the right nostril. The brain was anæmic, but otherwise normal. The meninges were deeply congested. The heart was healthy in substance, and all the valves were found to be competent. The right ventricle contained a

[2] Mitchell Bruce: Year-book of Treatment, 1891, p. 28.
[3] Transactions of the Obstetrical Society of Edinburgh, vol. xv., p. 183.
[4] THE LANCET, March 10th, 17th, and 24th, 1894.

small quantity of dark-coloured fluid blood, the left ventricle was quite empty. Both ventricular walls were relaxed. The lungs were much congested throughout and everywhere highly crepitant. A considerable amount of frothy mucus, in part blood-stained, was present in the bronchi. The liver, spleen, and kidneys were hyperæmic, but otherwise normal. The stomach and contents were removed and preserved intact for expert analysis, consequently there was no opportunity afforded for inspection of the mucous surface of that organ.[1] The bladder contained from three to four ounces of urine. All the other organs were normal.

Remarks.—The recorded cases of fatal poisoning by cocaine are comparatively few in number. Among these are that of a woman seventy-one years of age, who died five hours after the subcutaneous injection of two-thirds of a grain;[2] and the case of a man, mentioned by Haenel,[3] in whom the injection of one and one-third of a grain was followed by a fatal result. Zambianchi[4] also records a case where death occurred in a female after three grains and a half had been administered hypodermically. It is stated that a man died almost immediately after swallowing twenty-two grains.[5] Montalti[6] relates in full detail the case of a woman in whom death occurred after twenty-two grains accidentally swallowed. The first published fatal case in England was that of a man who was given in mistake twenty grains and succumbed in about an hour.[7] A fatal case occurred in Russia from a dose of twenty-two grains administered by rectal injection.[8] A melancholy interest attached to this case, as the surgeon who in mistake prescribed this overdose immediately afterwards committed suicide. Recoveries have taken place after very large doses taken into the stomach. The most typical case of the kind I am acquainted with is that of a man who swallowed forty-six grains and recovered.[9] On the other hand, serious symptoms of poisoning have been occasioned by the hypodermic administration of such doses as the seventh of a grain[10] and less than half a grain.[11] One-twentieth of a grain given subcutaneously to a girl gave rise to dangerous symptoms,[12] and a hundredth of a grain applied to the eye of a patient aged fourteen years has occasioned symptoms of poisoning.[13] The case I have above reported lends support to the correctness of Mannheim's[14] estimate that the fatal dose of cocaine is about fifteen grains. In the present state of our knowledge it is, however, practically impossible to state the smallest lethal dose, seeing that a dose of two-thirds of a grain has caused death, and so minute a dose as a hundredth of a grain has given rise to symptoms threatening life.

Leith.

[1] No analysis was made, as the Crown authorities were satisfied that the case was one of poisoning by misadventure.
[2] Dixon Mann: Forensic Medicine, first edition, p. 569. 1893.
[3] Berliner Klinische Wochenschrift, 1888, p. 890.
[4] Gazzetta degli Ospedali, 1888.
[5] Guy and Ferrier: Forensic Medicine, seventh edition, p. 625. 1895.
[6] Lo Sperimentale, 1888, p. 294.
[7] THE LANCET, Feb. 9th, 1889.
[8] THE LANCET, Sept. 28th, 1889.
[9] Dixon Mann, loc. cit.
[10] Luff: Forensic Medicine, first edition, vol. i., p. 314. 1895.
[11] Gooding: THE LANCET, Feb. 25th, 1888.
[12] Hamilton: System of Legal Medicine, first edition, vol. i., p. 429. 1894.
[13] Ibid.
[14] Zeitschrift tür Klinische Medicin, 1891, p. 380.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

THE INFLUENCE OF INHERITANCE ON THE TENDENCY TO HAVE TWINS.

BY ROBERT CORY, M.D. CANTAB., F.R.C.P. LOND.,
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THE following has been written to draw attention to the great factor of causation that inheritance plays in those who have twins. Like almost all of our inherited peculiarities, the tendency may come either from the maternal or from the paternal side. The relative frequency which either the maternal or the paternal side plays can only be established after considerable observation of cases. At present I have only collected seventeen cases. They include every case of twins I have investigated as to the above-mentioned point. Of the seventeen cases there is a history of twins to be obtained in 13, or 76·47 per cent. As the observations have been made almost entirely among the uneducated class this is a more remarkable fact than if they had been made among the more fortunate class, for the former class can rarely give any information of their families further back than grandparents. In eight cases the inheritance came from the maternal side only, or 47·06 per cent. In four cases the inheritance came from the paternal side only, or 23·53 per cent. In four cases there was no history to be obtained, or in 23·53 per cent. In one case there was a history on both sides, or in 5·88 per cent. When the inheritance comes from the father's side the twins seem to be always of the same sex, so far as the present observations go. This is interesting, for it is generally known that when the twins are joined together they are always of the same sex, and we may, therefore, reasonably suppose that this result is brought about by some abnormal potentiality of the spermatozoa — that is, this form of abnormality comes from the paternal side. The following is a table of the cases:—

Number.	Date of birth of twins.	Age of mother last birthday.	Birthday of mother.	Number of children, including twins.	Twins' sex. First child.	Twins' sex. Second child.	Whether inheritance is on the mother's or father's side.	Condition of placenta.	Nearest relative who has had twins.
1	1894	—	—	—	F.	F.	Father.	—	Father's grandmother.
2	—	—	—	—	F.	F.	Father.	—	Father's mother.
3	—	—	—	—	M.	F.	Mother.	—	Mother's grandmother.
4	—	—	—	—	F.	F.	Father.	—	Father's grandmother.
5	—	—	—	—	M.	M.	No history.	—	—
6	—	—	—	—	F.	F.	Mother.	—	—
7	—	—	—	—	M.	F.	Mother.	—	Mother's grandmother.
8	Aug. 29, 1894	41	Jan. 7	—	M.	F.	No history.	—	—
9	—	—	—	—	M.	M.	No history.	—	—
10	—	36	May 23	—	M.	F.	Both sides.	—	First cousin of mother and grandmother of father.
11	July 31, 1895	25	Feb. 6	7	M.	F.	Mother.	—	Mother's mother.
12	Sept. 8, 1895	26	June 2	6	F.	F.	Mother.	Single; two sacs.	Mother's aunt.
13	1895	19	—	—	M.	M.	Mother.	—	Mother's grandfather was a twin.
14	—	—	—	9	F.	F.	Mother.	One placenta; two sacs.	Mother's sister.
15	Oct. 10, 1895	25	March 20	—	M.	M.	Mother.	Double.	Mother.
16	Oct. 12	36	Oct. 1	4	M.	M.	No history.	Single; one sac.	—
17	Oct. 20	26	Aug. 14	5	M.	M.	Father.	Single; two sacs.	Father's maternal aunt.

Lambeth Palace-road, S.E.

PUERPERAL SEPTICÆMIA: USE OF STREPTOCOCCUS ANTITOXIN.

BY ANGUS E. KENNEDY, L.R.C.P. LOND., M.R.C.S. ENG., L.S.A.

A PRIMIPARA aged twenty-eight years was confined on Aug. 28th, 1895. The presentation was left occipito-posterior, and a child weighing ten pounds was delivered with forceps, the occiput not rotating and the perineum being torn to the sphincter. The labour lasted twelve hours. She recovered fairly well and progressed till the evening of the fourth day, when her temperature rose to 103° F. and she had a shivering fit; but after a copious motion—the bowels had not been open since the confinement—the temperature became normal, and she went on without regaining strength till Sept. 11th, when the temperature rose to 101° in the evening. On Sept. 12th she was carried to a sofa, but soon asked to go back again. On Sept. 13th she was not well enough to be moved. On Sept. 14th, seventeen days after labour, she had a slight rigor in the morning, followed by a more severe one in the afternoon, when the temperature rose to 104°. On Sept. 15th her temperature was 104°, the pulse 130 and very feeble. The abdomen was somewhat distended and tympanitic, the tongue being fairly clean. There was no uterine tenderness. After a copious evacuation of the bowels her temperature fell, and she remained very exhausted and feeble, but with a normal temperature till the evening of Sept. 17th, when it rose to 103° and her pulse to 120. There were no local symptoms whatever, and the distension of the abdomen had disappeared, but her pulse was so bad and her general condition so very much worse that I gave her 40 c.c. of the antitoxin at once. In six hours her temperature had fallen to 100°, and the pulse to 112, and she said her head felt much clearer; but fourteen hours after the first injection her temperature had risen to 102°, and the pulse to 120, and I then gave her 45 c.c. of antitoxin. Her temperature reached 99° in six hours, and in twenty-four hours was normal, and since then there has been constant improvement, though she remained so exhausted that it was seven weeks before she was able to walk across the room alone, and she is as thin as a convalescent from typhoid fever. The child was of course weaned before the first injection. My idea of the case is that there was a septic thrombus in a vein, which was loosened and carried into the general circulation when she was taken out of bed; but the actual cause of the symptoms is very obscure, though no one seeing her would have doubted its being septic.

Being the first time that streptococcus antitoxin has been used in England the case seemed worth publishing, and I am indebted to Dr. Ruffer for his kindness in getting me the antitoxin.

Plaistow.

A CASE OF COMPLETE SEPARATION OF THE UPPER JAW.

BY G. HERBERT HOPKINS, F.R.C.S. ENG.,
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A MAN aged forty-nine years was admitted to Swansea Hospital on Aug. 7th, 1895. He had been struck on the back of the head by a wooden beam and knocked forward on to a coal truck, the sharp edge of which had caught him at the root of the nose. On examination the whole of the upper jaw was found to be detached from the skull, the nasal processes of the superior maxillary bones and the zygomatic processes of the malar bones being fractured. There was over an inch of separation in the middle line. The frontal sinus and anterior ethmoidal cells were opened up. The eyes were quite uninjured. The parts were cleaned and stitched up, free drainage being provided for by the nose. A Smith's gag was used, which kept the parts in very good position. The patient wore this continuously for a fortnight. He is now quite well with the exception of slight ptosis of the right eye

Swansea.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

LIVERPOOL ROYAL INFIRMARY.

CASE OF HYDROCEPHALUS; TREPHINING; OPENING OF THE FOURTH VENTRICLE; RECOVERY.[1]

(Under the care of Dr. GLYNN, and Mr. THELWALL THOMAS).

THIS case is a brilliant example of the good results obtained by modern surgery in a disease which has hitherto, with very few exceptions, proved fatal. It is only necessary to read the subjoined notes to understand how desperate the condition was in this patient. The methods formerly adopted by surgeons for the relief of hydrocephalus—tapping the lateral ventricles of the brain through the anterior fontanelle or after trephining when the skull had already closed—were but palliative in their effects, and death was only postponed for a time. Drainage of cerebro-spinal fluid from the spinal canal has been unsuccessfully tried, and until Mr. Parkin, following out some suggestions made by Mr. A. C. Morton, trephined a child aged four years and a half on April 4th, 1893,[2] we were without proof that the operation could be done on the living subject. It is true that this first case was unsuccessful, but great temporary relief was afforded to the patient, and when the case alluded to by Mr. Thelwall Thomas in his remarks came under treatment operation with slow drainage for eighteen days was followed by complete success. It is very evident from this brief abstract that the number of cases in which it is possible to do any good by operation is very few, for it may be taken for granted that if such came under the observation of physicians they would eagerly avail themselves of this chance of effecting a cure. The operation is only in its infancy as yet, and therefore it behoves those with any experience to give the profession the benefit of it. For the notes of this case we are indebted to Mr. Thelwall Thomas, senior surgeon to the infirmary.

The patient, a young man aged eighteen, was admitted into the Royal Infirmary, Liverpool, on March 15th, 1895, with the following history. Eighteen months previously, when a steward on an Atlantic steamer, he began to suffer from occasional attacks of severe headache and giddiness, which lasted for a few hours at a time. The pain was most marked in the back of the head. The attacks increased in severity and frequency, so that for the last six months he had hardly been free from pain. Latterly the attacks of giddiness had been so severe that he fell during them, always towards the right, although surrounding objects appeared to revolve to the left. For five minutes before an attack he felt very sick (he had only vomited once, three months previously, when an iron hook struck the back of his head and determined a fit); his head felt very hot, but he experienced a sensation of coldness and numbness in the trunk and limbs and a buzzing noise in both ears. If he closed his eyes the giddiness was not so troublesome, and he could avoid falling if he clutched at a railing or some article of furniture. When he fell he had remained on the floor as long as half an hour, conscious, but unable to rise or speak, although he understood what was said to him. Memory, sight, and hearing had been gradually failing. For six months he had suffered from insomnia, occasionally getting a few hours' sleep only to wake up with intense headache. For the last three weeks he had been afraid to leave his bed on account of the giddiness. On admission he was found to be a well-nourished thick-set youth with a very dull look and a large head twenty-five inches in circumference. His temperature was 97·6° F. and the pulse was 66. Severe headache was referred to the right occipital region; the head was tender

[1] This case formed the subject of a paper read before the Medical Institution, Liverpool, on Oct. 17th, 1895, the patient being exhibited.

[2] THE LANCET, Nov. 18th, 1893.

to percussion all over, particularly so in the frontal region. There was slight nystagmus on looking to the right; the pupils reacted well to accommodation and light, but were unequal in size, the right being 3 mm. and the left 2½ mm.; both optic discs were in a condition of marked neuritis, and the fields of vision were slightly restricted. With the left ear he could hear a watch on contact, and with the right ear at a distance of four inches (this ear had been deaf since he was eight years old, when he had scarlet fever). There was no middle-ear disease. Smell and taste were normal. On getting him out of bed to stand he reeled like a drunken man and fell towards the right; he made very wide shots at his nose with the index-finger of both hands. The plantar and knee reflexes were present, but the abdominal and cremasteric were absent. He had occasional loss of control over the bladder, but the bowels were very constipated. The respiratory and circulatory systems were normal. There was no history of tubercle or syphilis in the family, and the patient had never had gonorrhœa or syphilis. Ten grains of iodide of potassium four times a day were given, and inunctions with mercury ointment were used, supplemented by ten grains of bromide of potassium in a few days, also five grains of blue pill to overcome constipation. Morphia hypodermically in quarter-grain doses was necessary to procure sleep, and the only rest from pain was due to this drug. In the first five days he lost control of the bladder on two occasions, and on the sixteenth day after the administration of a drop of croton oil given as a purgative he passed urine and fæces involuntarily. On the seventh day the pupils were sluggish and the occipital pain more severe. Six leeches were applied over the right mastoid region with some relief, and on the nineteenth day six more were used with temporary relief, but he slowly got worse. On the twenty-sixth day (April 10th) he was much worse, the pain was continuous, and vomiting had become an occasional symptom. Mr. Thelwall Thomas saw the patient for Dr. Glynn, and he now had marked nystagmus and diplopia, with paralysis of the right fourth nerve; the veins of the scalp on the right side in the occipital region were greatly distended. He could hardly stand with his eyes open and holding on to the bed with his hands; if he closed his eyes he at once fell to the right. His temperature had been subnormal since admission; it had never once reached the normal line. He had all the classical symptoms of marked intracranial pressure, and all indications pointed to the right cerebellum and vermiform process. After consultation with Dr. Glynn it was decided to explore through the right cerebellar fossa. Knowing that symptoms indicating cerebellar disease have led to operation without any discovery of tumour (nine out of sixteen operated upon—Starr), it was decided to explore the neighbourhood of the fourth ventricle if no tumour were found. On April 17th the patient's head had been shaved, well cleansed, and covered with a carbolic towel for twenty-four hours. Chloroform was administered by Dr. Armstrong, house physician. An incision, commencing at the right mastoid process and proceeding along the superior curved line of the occipital bone and down the middle line of the neck for two inches, was rapidly made. With a few strokes of the knife and a free use of the raspatory the lower part of the occipital bone was exposed. The bleeding was terrific from the scalp and emissary veins, which appeared to be legion, coming from the lateral and occipital sinuses; these were temporarily controlled by clamp forceps and sponge pressure manipulated by Mr. T. H. Agnew, house surgeon. An inch trephine was applied to the bone about the middle of the cerebellar fossa. After a few turns, when only through the external table, the patient stopped breathing. Artificial respiration by using the left arm *à la* Silvester and compression of the right chest during expiration was carried out, and the operation hurried on. Manipulation of the right arm would have hindered the operation. As soon as the crown of bone came away the dura mater bulged to beyond the outer table, was pulseless, and looked like a button mushroom. The patient made a few attempts at natural breathing; the dura mater was at once incised, when some fluid escaped. The finger was inserted and gently insinuated under the cerebellum, but nothing abnormal was felt, although the under surface of the right lobe, the vermiform process, and a portion of the left lobe were explored; so the finger was directed towards the fourth ventricle and encountered a soft bulging which immediately gave way, and the posterior surface of the medulla was clearly felt, but the space was not at all suggestive of a cyst. On withdrawing the finger a rush of fluid took place, and the cerebellum and dura mater fell within the skull and the patient breathed freely and fully. The hæmorrhage from the above-mentioned veins ceased. It was considered certain that the partition broken down was the posterior medullary velum bounding the fourth ventricle, and that an internal hydrocephalus had been relieved. The hole in the dura mater was sutured, the vessels in the flap were ligatured, and the site of the operation was cleansed with hot 1 in 40 carbolic lotion. The piece of bone was not replaced on account of a slight oozing of clear fluid which trickled through the dura mater. Silkworm-gut sutures united the flap and a small rubber drainage-tube was laid through from end to end at the base of the flap, but not into the cranial cavity. Dressings of cyanide gauze under wood-wool tissue were applied under a capelline bandage. The patient was collapsed from loss of blood, but quickly rallied, and on regaining consciousness at once cried out that the headache had gone. He slept well. The wound was dressed on the second day, and on the fourth the tube was removed. Union had taken place all along the line except, of course, where the small orifices occupied by the tube were. The ataxia as tested on the arms appeared less marked and his vision was only blurred, and he instinctively covered the right eye "to do away with the shadow," as he expressed it. The stitches were removed on the tenth day and a collodion dressing applied as a protective. There was occasional nystagmus for some days, but this and the blurred vision quickly righted themselves. For four days (from the twenty-fourth to the twenty-seventh after operation) his urine had to be drawn off and constipation required purgatives; it was also noticed that he had some weakness in the right arm and hand—dynamometer test, right, 20; left, 50; but in eight days this recovered and the test recorded—right, 75; left, 65. He was allowed to get up on the forty-first day, and on the sixty-third he was sent to the convalescent home at Woolton, walking well without ataxia, seeing plainly, and expressing himself as quite cured. During convalescence he had a slight frontal headache one day for a few hours, but he slept well and did not require a single dose of morphia or sleeping draught after the operation. On Oct. 17th he walked well without ataxia, his reflexes were normal, and he read $\frac{2}{20}$ with both eyes. The right optic disc was normal, but the left had a small patch of neuritis still present where a vessel left it. Hearing was normal in the left ear, but he only heard a watch a few inches from the right ear (this had been so for years). There was no headache or giddiness.

Remarks by Mr. THOMAS.—Obliteration of the foramina in the posterior medullary velum has been noticed in many cases of hydrocephalus, and it is just conceivable that some mild chronic meningitis may have effected this here, producing all the symptoms of intracranial pressure. Lowson of Hull[3] opened the fourth ventricle in a child and drained externally, but the case terminated fatally; the operation was performed after lumbar incision into the subdural space had failed, thus emphasising the fact that the foramen of Majendie and the fissures in the lateral recesses of the fourth ventricle were obliterated. Parkin of Hull[4] has opened the subarachnoid space in a child aged eleven months, and drained for eighteen days with success. Waterhouse,[5] in a case under the care of Dr. W. W. Ord, drained the subarachnoid space for eighteen days in a case of tuberculous meningitis with perfect success. One cannot hope much from this procedure in hydrocephalus unless the fourth ventricle is also opened.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY.

A CASE OF PITYRIASIS RUBRA.

(Under the care of Mr. F. SKAIFE.)

WE published in THE LANCET of July 27th of this year (p. 207) the account of a case of this somewhat rare affection of the skin, and by means of illustrations showed the general character of the eruption. In that case the patient, who was under the care of Mr. W. Cooper of Barnstaple, was also a female, but younger (being only twenty-eight years of age), and the disease continued for three and a half months without any complication; there was, however, considerable

[3] Brit. Med. Jour., June 24th, 1893.
[4] THE LANCET, June 1st, 1895, p. 21.
[5] THE LANCET, March 10th, 1894, p. 597.

exhaustion and loss of strength afterwards. The occurrence of the diarrhœa and the renal inflammation during the progress of this case were probably indications of the extent to which the function of the skin was interfered with, and it is interesting to observe their sequence. According to Hebra the sufferer from pityriasis rubra (acute general exfoliative dermatitis) remains in good health for a long time, but ultimately wastes, becomes cachectic, and sinks from exhaustion. For the notes of this case we are indebted to Dr. A. W. Kirkpatrick-Picard, house surgeon.

The patient, a widow aged fifty-nine years, was admitted into the infirmary on Nov. 13th, 1894, under the care of Mr. F. Skaife, suffering from a varicose ulcer on the left leg. The ulcer was unhealthy-looking, about the size of a five-shilling piece, and the skin around was eczematous. She was in a feeble state of health generally and looked considerably more than her age. Her past history was good except for occasional slight attacks of eczema. She had suffered more or less from the ulcer on her leg for some years. Apart from this the woman was apparently sound all over. The urine was normal, though of rather low specific gravity (1010). During the first ten days the ulcer steadily improved with rest in bed and treatment, which consisted of boracic fomentations for three days until it was clean, and then a weak sulphate of zinc lotion was applied. On the 24th the eczematous skin around the ulcer became markedly reddened. This condition rapidly spread over the whole body, other patches of redness occurring and coalescing until all the limbs, the trunk, and the head were affected within thirty-six hours of the time the change was first noticed on the leg. During the onset there were no marked symptoms beyond some slight prostration, and the patient was somewhat alarmed at her sudden change of colour, which became uniformly bright scarlet. There was no papular affection of the hair follicles. The condition of the ulcer was unaffected by the general dermatitis. There was no exudation or thickening of the skin, nor was there at first any itching. The mucous membrane of the mouth and throat did not show any marked congestion. The urine remained unaltered, and there was no rise of temperature and no acceleration of the pulse or respiration. The skin became covered with thin wafery scales, and this was followed by profuse shedding, large flakes coming off the hands and feet. The skin beneath the scales was bright scarlet. The patient, who had been in bed ever since admission, was kept warmly clothed and put on a light nourishing diet. Externally ointment of tar with vaseline was applied to the skin, and internally a mixture containing strychnine and digitalis was given. The condition remained without any improvement for about a fortnight, when there was a slight diminution in the amount of scales shed as measured by the handfuls removed from the bed. The front of the trunk and the head were the first parts to show areas of healthy skin three weeks after the onset; the limbs and the back were still very acutely affected. At this time (Dec. 15th) the patient was first ordered brandy, three ounces in the twenty-four hours, owing to increasing feebleness of the heart's action. The improvement in the skin of the trunk was not constant, fresh patches continually lighting up, accompanied by free shedding, though the head was never so markedly affected as at the first onset. At the beginning of January, 1895, the itching, which previously had been very slight and occasional, became very marked, especially in the legs and hands, and no relief was obtained until a lotion of subacetate of lead and opium was applied. At this time the tar ointment was replaced by a lotion of oxide of zinc, boracic acid powder, and subnitrate of bismuth in olive oil. During the early part of January the trunk and upper arms were distinctly better, the lower limbs and buttocks, the hands, and the forearms being the parts chiefly affected; these, however, slowly improved until about the middle of February, when the skin was healthy except over the buttocks, and on March 1st the skin was sound all over. The return to a healthy condition only lasted one week, for on March 8th the whole skin again became involved, fresh scarlet patches appearing almost simultaneously over the whole body and involving the entire surface within two days of its reappearance. Free shedding of the skin followed, lasting for eight days before there was any apparent diminution in the quantity of scales cast off. There was now a steady improvement with occasional slight outbursts, especially of the skin on the front of the abdomen, until the end of April. During this relapse the patient complained of marked general tenderness. The total duration of the second attack was about nine weeks, the first attack having been over twelve weeks. On March 17th, just when the diminution in the amount of shedding was noticed, there was an attack of diarrhœa which lasted until the 20th. On the 21st, for the first time since her admission, the temperature rose to 101° F. in the morning and to 101·2° in the evening, and on that day the urine was scanty and smoky, acid, and of specific gravity 1010, and it contained blood and one-fourth albumin. The temperature reached 101·2° in the evenings of the 22nd and 23rd, and on the latter date the patient complained of pain in the left knee. The joint was swollen and tender, and the synovial membrane was distended with fluid; the skin was of a dusky-red colour and felt hotter than that of the opposite knee. A back splint was applied, and a mixture containing bicarbonate of soda, carbonate of lithium, and colchicum was given. It was found necessary to remove the splint after a couple of days owing to its causing slight irritation of the skin, and the limb was steadied between sandbags. The pain had disappeared on the 25th, but the joint still remained swollen. The blood and albumin in the urine diminished steadily after three days from their first appearance, and by the 29th the urine was normal. The swelling of the knee did not entirely subside until the beginning of May. The patient was very feeble on her legs for some time afterwards, and was not able to get up until May 15th, when she was assisted into a chair. On the 30th she was carried out into the grounds for the first time. She recovered strength very slowly and was not discharged till the end of July, when she left completely cured though still somewhat feeble. During the last three months of her stay in the infirmary there was no return of her skin affection.

The satisfactory result of the case was in the opinion of Mr. Skaife largely due to the careful way in which the patient was nursed throughout her long stay of eight months and a half in the infirmary.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

Intestinal Resection and Exclusion.

AN ordinary meeting of this society was held on Oct. 28th, the President, Sir JAMES CRICHTON BROWNE, being in the chair.

Mr. C. B. KEETLEY related three cases of Intestinal Resection and Intestinal Exclusion. The first was in a girl aged seventeen, who had been ill for a year after exposure to cold and wet. She was in a hectic state and passed pus per anum. A large abscess was present in the lower abdominal wall. This was opened and the wound afterwards partly closed, the lower part, from which a fistula led to the rectum, being packed with gauze. A fistula opened into the small intestine a few days afterwards. Later, laparotomy was performed and the small intestine proximal to the fistula divided and united end to end by Maunsell's method to the gut distal to the fistula. Thus a portion of ileum was excluded, and from this portion fistulæ led to the rectum and skin respectively. The patient was now in good health and wore a colotomy truss over the fistulous opening in the abdominal wall. The second case was a girl aged fifteen, who presented two tumours in the abdomen below and to the right of the umbilicus; the lower tumour was fixed and the upper one movable. The patient was emaciated and suffered from vomiting, and there was hæmorrhage from the rectum. An incision was made over the upper swelling, the ascending colon presented, and a tumour was felt within it. The colon was opened and the tumour found to be a growth involving the region of the ileo-cæcal valve, which was intussuscepted into the cæcum. The tumour was cut off flush with the wall of the cæcum and the cut edges of the small intestine united to those of the cæcum by Maunsell's method, save that the stitches did not traverse the peritoneal coat. Six weeks later an attempt was made to remove the lower swelling, which proved to be a retro-peritoneal glandular mass, and which had grown in the interval. In taking this mass out the meso-colon was divided, and this led to the sloughing of a portion of the

wall of the colon and the formation of a fistula. The patient ultimately died from chronic obstruction due to recurrence of growth in the retro-peritoneal glands. The third case occurred in a middle-aged man who was very anæmic from advanced cancer cachexia; there was a large perfectly movable tumour in the left side of the abdomen. The growth was removed, together with the splenic flexure and a portion of small intestine which were embedded in it, the operation taking three hours and a half. The proximal portions of both colon and small intestine were united to their respective distal ends and the abdominal incision closed. The patient, who suffered great pain, died after twenty-four hours.

Mr. HERBERT ALLINGHAM related a series of cases of Intestinal Resection including all the cases he had done, as by so doing only was it possible to arrive at a definite conclusion as to the correct way of treating cases of intestinal stricture. He had operated upon 10 cases—6 recovered and 4 died. In 4 of the cases that recovered the intestines were empty prior to the resection. In the 4 that died the stricture was resected while the intestines were distended. From this it was seen that distension of the intestines at the time of resection enormously increased the risk of the operation. The following was, perhaps, the explanation: when the intestines were distended large quantities of fæces were pressed down towards the seat of union, and no doubt were constantly disturbing it by the peristalsis they set up. Further, the patient was in a way poisoned by the fæcal accumulation, and when in such a state the union between the divided ends of the intestine might be delayed or take place in a feeble or even imperfect manner. Again, in large intestine cases fæces might block the bobbin and so tear it away. Therefore, stricture of the large intestine must not be resected when the intestine above the stricture was distended with fæces. Stricture of the small intestine might be resected even when the gut was distended, for the fæces were liquid. The following course should be carried out in distended cases. The gut just above the stricture should be fixed to the abdominal wall—in fact, a colotomy performed—and so the intestine thoroughly emptied. Later the colotomy opening and stricture should be resected, and an end-to-end anastomosis done. In some cases it was possible to bring the strictured piece out through the abdominal wall; then it should be fixed and the gut above it opened. Later the strictured piece of gut could be resected, and then an end-to-end anastomosis done. Some form of button or bobbin was necessary in cases of intestinal resection or anastomosis.

The PRESIDENT expressed his admiration of these operations, which involved great foresight, manual dexterity, and ingenious contrivance.

Mr. MAYO ROBSON sent a written communication, in the course of which he stated that he had employed decalcified bone bobbins in a large number of cases. These were made in various sizes, and for them he claimed the following advantages. They enabled the operation to be completed with simplicity, rapidity, and efficiency, a continuous suture being employed and none other being required; there was no tension on the gut, and therefore no sloughing; there was a continuous mucous channel, and therefore no cicatricial contraction; the bobbin guarded the line of suture while the raised ends of it kept it in place. There was no foreign body within the gut, as the decalcified bone speedily dissolved; it was so light that the gut could not kink from its weight; its presence caused no irritation within the gut; it served equally well for all kinds of operations upon the intestine, and in the hands of himself and others it had proved safe and efficient.

Mr. L. BIDWELL spoke in favour of Halstead's method of suture, the essential principle of which was that the submucous coat should be included in every stitch. If a straight needle were used and it were pushed in until resistance were felt and then lateralised this would be accomplished. After using Maunsell's method on one occasion he had some fæcal discharge from the wound.

Mr. BRUCE CLARKE thought that no general rule could be laid down for intestinal suture, but he preferred as a rule to do without mechanical apparatus. He referred to the case of irreducible hernia in a boy (already published in the Clinical Society's Transactions), in which he resected portions of both the small and large intestine, uniting first the mucous membrane with a continuous suture and then uniting the peritoneal and muscular coats by a second continuous suture, fastening it off in four or five places round the circumference, another row being placed beyond this if necessary. He had employed the same method in gastro-enterostomy. He knew of two cases in which Murphy's button had been used in which death resulted afterwards from perforation when the button had moved down the bowel and had become impacted there.

Mr. LOCKWOOD said that two very clear theses were before the meeting. One was that the operation should not be performed when the gut was distended and paralysed, an endeavour being first made to empty the gut and then afterwards to suture. The other thesis was to use a bobbin in intestinal suture. He had operated on two cases in which the small intestine was the seat of trouble: one was a case of gangrenous gut, and it recovered; the other was one of intussusception, and it died. In both the gut was united without bobbin by a method similar to that described by Mr. Clarke. He thought that in the small intestine bobbins were not required, but in the large gut they might be wanted; the large intestine would tolerate the presence of a hard mechanical object better than the small bowel. In cases of end-to-end suture for gangrenous bowel the operation was performed under more adverse conditions than the cases Mr. Allingham had related, but the results appeared to have been equally successful. He regretted that Mr. Robson had not given a list of his cases, as a definite series of corresponding cases was required to decide as to the best method.

Mr. JONATHAN HUTCHINSON, jun., said that three years ago he resected five inches of gangrenous small intestine in a case of femoral hernia, using the simple method of suture without bobbin; that case was at present well. Three other similar cases all proved fatal: one died from giving way of the sutures soon after the operation; in that case the gut was excessively thin; the other two lived ten days and fourteen days respectively, and the fourth he thought would have recovered but for the supervention of pneumonia; during the coughing which accompanied this a small part gave way.

Mr. STANMORE BISHOP said that Murphy's button as at present made had holes which were apt to cut the intestine. Jessett's bobbin was quicker in application than Robson's. It should not be forgotten that celerity in uniting the ends of intestine was not the most important matter.

Mr. KEETLEY, in reply, said that he agreed that mere celerity was not so important as some would think. A prolonged operation would not affect the patient much if he were kept warm and loss of blood avoided. Temporary fæcal fistula seemed to have followed nearly every described kind of suture. The bobbins often acted as mechanical irritants.

Mr. ALLINGHAM, in reply, said that the bobbins kept the gut at rest and rendered suture easier. In two cases after using Murphy's button the gut had given way, and he knew that a good many other cases had occurred.

CLINICAL SOCIETY OF LONDON.

President's Introductory Address.—Impetigo Contagiosa Gyrata.—Sequel to Case of Patellar Sarcoma.—Treatment of Acute Pleural Effusion by Incision.

AN ordinary meeting of this society was held on Oct. 25th, the President, Dr. T. BUZZARD, being in the chair.

The PRESIDENT delivered an Introductory Address. After expressing his thanks for the great honour the society had conferred upon him by electing him to a post which was unsurpassed, in his estimation, by any that could fall to the lot of a practising physician, he remarked that some of the aspirations which had been expressed at the foundation of the society twenty-eight years ago had not been, perhaps, altogether fulfilled. The application of drugs and medicaments for the cure or relief of disease—the existence of which appeared to be looked upon as a foregone conclusion—overshadowed everything else in the first President's address, which contained no hint of investigation of disease with a view to its prevention as work to engage the attention of the society. The last quarter of a century had wrought an extraordinary change—a signal illustration of which was to be found in the revolution brought about as a result of Pasteur's immortal researches extended and applied to surgery by the genius of Lister. The success in the treatment of myxœdema—a disease the investigation of which was so largely

identified with the Clinical Society—was an example of the application of the scientific method in medicine as striking as anything to be found in the domain of physics. The success in the treatment of vast numbers of cases of paralysis and convulsive disorders which had followed the discovery of their frequent dependence upon syphilis was another example of scientific therapeutics as contrasted with the tentative application of drugs which was formerly the rule. And so also was the recognition of the influence of alcohol in the causation of a form of progressive paralysis, which opened the way at once to success in treating such cases. With our present knowledge of that which was formerly most frequently unsuspected we could picture to ourselves the numerous cases of this description which even at the time of the society's formation must have gone steadily on to death uninfluenced in any degree by the various drugs and other measures which were employed. How little would here avail the most careful trial and comparison and statistics of the effect of this or that drug. In the absence of the key to the cause of the disease success in treating it would be impossible. Reference was made to the question of the causation of disease by micro-organisms, and it was remarked that in disease of the nervous system the infective origin of leprosy, tetanus, hydrophobia, and diphtheritic paralysis admitted of no reasonable doubt. He suggested that there was a most interesting field for inquiry as to the possible dependence of many chronic diseases of the nervous system upon a source of infection. Infantile paralysis (acute anterior poliomyelitis), there could be little or no doubt from the occurrence of many epidemics of the disease, was an infective disorder. It was possible, he thought, that the form of progressive muscular atrophy in which the lesion occupied the same anatomical position would be likewise found to be of infective origin. Insular cerebro-spinal sclerosis, there were strong reasons for believing, owed its origin to some influence of this description. The suggestion that chorea and some forms of epilepsy had an analogous origin was yet but a conjecture, which appeared, however, to be worthy of investigation. As regarded such "family" diseases as certain myopathies and the so-called Friedreich's ataxy, the supposed hereditary element might prove, he thought, to be open to a similar doubt to that which many of us experienced respecting tuberculosis and cancer, and that what appeared to be an inheritance might be, at least in great part, the result of exposure of members of the same family to a local source of infection. The subject was one which must be approached from several sides, especially the clinical, bacteriological, and chemical. He could imagine no more important inquiry and no society the members of which were so well qualified to do justice to it as that which he had the honour to address.—A vote of thanks to the President for his able address was proposed by Mr. CHRISTOPHER HEATH, seconded by Dr. RADCLIFFE CROCKER, and carried unanimously.

Dr. RADCLIFFE CROCKER related the details of a case of Impetigo Contagiosa Gyrata. He said that the eruption was a new form of impetigo contagiosa in this country which had occurred in the last two years, and that well-marked cases were rare. It was characterised by the formation first of a pink papule the size of a hempseed with a slight indication of vesiculation at the apex; this enlarged and formed first a tense and later a flaccid bulla from a quarter to a third of an inch in diameter, with sero-purulent contents; a faint narrow red areola surrounded the bulla. The bulla dried into a thin scab, enlarging at the periphery, where there were still indications of fluid, and beyond that again the areola had become pronounced. When the centre cleared a thin greenish crust on the ragged inner edge enclosed the clear centre and was itself surrounded by a red areola. The largest single lesions were about an inch across, but some of them coalesced and formed compound lesions of several square inches in area, and a patch with a gyrated outline was thus produced. In the patient the whole back was covered with these gyrate patches, but in many patients there were only a few lesions from unruptured bullæ; pure cultures of staphylococcus pyogenes aureus were obtained, and in some cases an ordinary form of impetigo contagiosus was present simultaneously with the gyrate eruption either in the patient or in some other member of the family. He was not aware that this form of eruption had been previously recognised except by Dr. Patrick Manson, who had described a pemphigus contagiosus tropicus, and, judging from Dr. Manson's description, this other affection above discussed appeared to be identical.—The PRESIDENT asked if any plan of diagnosis could be suggested other than the bacteriological one to discriminate between this disease and pemphigus associated with disease of the nervous system.—Dr. P. MANSON, referring to the Chinese or Malay disease, said that that affection did not correspond to the one that had been shown. It was not characterised by such a degree of surrounding inflammation, there was more marked exfoliation of skin around the spots, and the eruption was entirely confined to the hot portion of the year. The application of perchloride solution of the strength of 1 in 1000, and dusting with boric acid powder, was followed by a rapid subsidence of the disease. He had ascertained on microscopical examination that the organism was a diplococcus and not a staphylococcus.—Dr. CROCKER, in reply, said that in these cases the mode of development was different from cases of pemphigus, and the eruption was scattered and accidentally distributed. It did not come out in crops as in pemphigus, and the bullæ did not remain tense. The degree of surrounding inflammation varied very much in different parts, and there was no doubt that many different pathogenic agents might produce morphologically similar eruptions.

Mr. R. W. PARKER communicated the sequel to a case of Removal of the Right Patella for Primary Sarcoma. The patient, a girl aged thirteen years, was shown to the society after the operation nearly seven years ago, as recorded in the Transactions, vol. xx., p. 254. The growth was intimately connected with the patella, which was removed. The girl recovered with a stiff joint and remained well for three years. Then a slight local recurrence took place in the scar, which was excised, after which the girl remained well for a further period of three years. Then some new growth occurred in the lymphatic glands deep in the pelvis. An attempt was made to remove them, but was only partially successful. The girl died after some weeks from exhaustion. At the necropsy masses of glandular new growth were found deeply seated in the pelvis. There were no secondary deposits in any of the organs or in any bone. The original growth was a firm spindle-celled sarcoma.—Mr. MARSH remarked on the rarity of this affection. He had only seen one case at St. Bartholomew's Hospital. The patient was a young woman; the tumour formed a large mass in front of the knee, and Sir James Paget dissected the growth entirely away. The patella was often enlarged in osteo-arthritis, but disease of that bone was rare, though he had seen a case of syphilitic disease of the patella which was at first regarded as a sarcoma. Recently he had seen a case of primary sarcoma of the synovial membrane of the knee-joint.

Dr. A. WILSON (Leytonstone) read a paper on the Treatment of Acute Pleural Effusion by Incision. The experience of three successful cases was given in favour of free incision into the pleural cavity with drainage as soon as the effusion was so large that it would not be reabsorbed. It was urged that in empyema the lung might be bound down by adhesions and compressed so as to be unable to expand again, and a case was quoted to illustrate this. The same occurred in a minor degree in pleural effusion if drainage were delayed. A case reported by Dr. Morrison[1] illustrated this. The first and second cases of pleural effusion were simple and recovered in about ten days; the effusion was large. In the second case Dr. Wilson removed five pints, the apex beat being displaced outwards to the nipple line. The heart returned to its normal position, and the lung expanded within half an hour, without distress or shock to the patient. Friction sounds indicated effusion of lymph on the pleural surfaces. On the third day the pleural cavity was shut off by the lung; then it was found that some air and fluid were sealed up lower down, so the pleural adhesions were detached to allow of drainage. Two days after the operation there were no abnormal physical signs. This was eleven years ago, and the patient died two years afterwards, the result of an accident; meanwhile she was healthy. The third case, in May, 1894, in a young woman, was complicated with severe influenza and pneumonia. When the operation was done the patient was almost moribund, being kept alive by constant oxygen inhalations and strychnine injections. Within forty-eight hours the lung had completely expanded. On the fourth day the lung closed the wound; about six pints of fluid had been removed from the right side. A week later she was very ill from pneumonia on the opposite (left) side. A fortnight later the

[1] Brit. Med. Jour., July 13th, 1895.

right side was normal. For some weeks the temperature kept rising at night, and she seemed to be in a rapid decline, so she went to Margate, where she regained the power of walking. In August Dr. Nichol reopened the incision, and about four ounces of sweet pus escaped; possibly the lung had closed the wound too soon, hence the great importance of always detaching the lung and draining the lower part. The incision was between the ninth and tenth ribs in the post-axillary line. Five months after the operation the cavity would hold from four ounces to five ounces of fluid and radiated about two inches all round the wound. The temperature kept up, and the case looked very unfavourable, like general tuberculosis. It was found that drainage was imperfect, that always about two ounces of pus were retained, and by inserting a small india-rubber drainage-tube downwards this part was kept empty. Then the temperature at once fell to normal and kept so, until finally the cavity was closed, and the wound healed in January, 1895, nine months after the operation.—Dr. S. WEST said that it was difficult to see why incision was practised when aspiration gave such good results. Incision was justifiable when ordinary methods had been tried, but had not succeeded. The lung expanded freely after paracentesis. He published recently a remarkable case treated ultimately by incision, and in that case, although the effusion was of two years' standing, the lung was not in any way bound down or adherent, though recovery was long delayed by empyema, which followed incision in spite of antiseptic precautions.—Mr. MARSH said that in cases of acute effusions into joints a surgeon would not hesitate to open and drain; similarly with acute hydrocele, acute diffuse periostitis, and with a rapid and large effusion into the abdominal cavity: these, he thought, were arguments for treating the chest in the same way.—Dr. WEST upon this wished to add a word of caution; there was much that could be done with a cavity like the abdomen that could not be done with the pleura.—Dr. WILSON, in reply, said that all the cases he had related were in a bad way, and not enough relief would have been given by aspiration. The incision relieved tension more completely than did tapping. He made the incision low down and posteriorly for the purpose of securing good drainage.

MIDLAND MEDICAL SOCIETY.

Exhibition of Cases and Specimens.

A MEETING of this society was held on Oct. 23rd at the Medical Institute, Birmingham, Dr. T. EDGAR UNDERHILL being in the chair.

Mr. GAMGEE showed a man aged twenty who had had a Thyroid Tumour half the size of a large orange, causing difficulty in breathing for the past two months. An operation was performed on Sept. 12th, 1895. Both the superior thyroid and the right inferior thyroid arteries were tied. Two small processes from the upper part of the gland and a process at the lower part into which the left inferior thyroid artery entered were left in position. Complete relief of symptoms ensued.

Dr. FOXWELL showed the Lungs of a man who had died from Acute Pneumonia. The interest lay in the great thickness of the visceral pleura over the greater part of each lung. The thickening was entirely fibrous, and on the surface lay recent lymph. The parietal pleuræ were not thickened and adhered to the visceral only by slight recent inflammatory bands. The illness began with diarrhœa followed in three days by stabbing chest pains. Widespread moist friction sounds were first heard, the pneumonic signs appearing later and very gradually, and never amounting to marked dulness or intense tubular breathing. The pneumonia crept over the greater part of both lungs. The presence of friction and absence of flatness in the percussion note prevented recognition of the old thickened pleuræ. The peculiarity of the dulness and breath sounds were considered as probably due to the partial distension of both chest wall and lung owing to the restraining pleura. The cause of the thickening was doubtful. There was no history of alcohol or syphilis. As a child the patient had had rheumatic fever twice; the heart was, however, healthy. Still, one or both attacks may have been complicated by pleuro-pneumonia, with the resulting slow fibroid growth resembling scar tissue. The case showed well the great difficulty sometimes arising in the diagnosis of thickened pleura in acute pneumonia, and, therefore, the great value of a knowledge of the previous state of a patient in making a prognosis.

Dr. SHORT showed a portion of Intestine from a case of Enteric Fever. The Peyer's patches were unusually large, with deep and extensive ulceration. Tremor of the hands had been a marked symptom throughout. Towards the end of the third week of her illness the girl, who was subject to epilepsy, had a severe fit. After this the pulse rapidly failed, and she died in about twenty-four hours.

Dr. SHORT also showed the Liver, Stomach, and Pancreas from a woman aged sixty-four. The stomach was divided into two cavities by an indurated cicatricial band which appeared to be secondary to a large transverse ulceration. There were several large nodules in the pancreas and neighbouring glands, strongly suggesting a malignant origin. The liver showed a large abscess towards the posterior part and several smaller ones in various parts of the gland; whilst scattered all over it were numerous soft hæmorrhagic foci obviously rapidly breaking down. Nothing was found elsewhere to suggest a pyæmic origin. The marked feature of the case was the latency of the symptoms up to a few days before death.

Mr. MARRIS showed a specimen of Intra-pericardial Aneurysm of the Aorta, with chronic adhesive pericarditis.

Mr. HEATON showed a Growth removed from the Umbilicus of a Boy aged four years and a half. The child was brought with a history that when he strained he "passed water from his navel." On making him cry a small jet of a clear yellow fluid ran from the umbilicus. A fine probe passed into a fistula at the umbilicus downwards and backwards for three inches and a half. The fluid was clear, light yellow, had a peculiar soapy feel, and was strongly alkaline—in fact, chemically resembled succus entericus. On abdominal section being performed a large, thick-walled, pear-shaped sac was found passing downwards and backwards and adherent by a band of fibrous tissue to the small intestine. The sac was partially excised in September, 1893. In August, 1895, the remaining part of the sac was removed and showed on microscopic examination the structure of small intestine. The vitello-intestinal duct forming the direct communication between the intestines and the yolk sac had been only partially obliterated. The end nearest the intestine was represented by a fibrous cord. Its outer half opened at the umbilicus and became distended by secretion into a thick-walled muscular sac.

Mr. CHAVASSE read notes of a case and exhibited a male adult upon whom a Primary Amputation of the Entire Upper Extremity had been performed for a machinery accident in May last. After the initial shock had been overcome recovery was rapid and healing complete in a month.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

President's Address.—Symphysiotomy.—Splenic Leukæmia following a Blow upon the Abdomen.—The Relation of Influenza to Diseases incidental to the Seasons.—Excision of the Larynx.—Exhibition of Specimens and Cases.

A MEETING of this society was held on Oct. 18th, Mr. A. W. MAYO ROBSON, President, being in the chair.

The PRESIDENT delivered an address, which we print in full this week, on the Surgery of To-day as compared with that of Twenty-five Years Ago, illustrated by the Work in the General Infirmary at Leeds.

Dr. BRAITHWAITE read the notes of a case in which he had performed Symphysiotomy.

Dr. CHURTON showed a case of Splenic Leukæmia following a Blow upon the Abdomen. The patient was a man aged twenty-eight years whose spleen filled the greater part of the left abdomen and extended beyond the middle line. The red blood cells were diminished in number; the leucocytes were 1 in 10. The patient looked well. The face and lips were red, the eyes bright, and the movements brisk; but he was unfit for heavy work (tachypnœa). His family was healthy. He had had no illness until this, though he had been careless in his diet, and had lived in a very damp house, and was often wet at work. In 1887 he was kicked in the abdomen rather severely, but not disabled. In 1892 a piece of steel weighing 2 lb. flew off a mass of steel struck by a hammer of 85 tons impact, and, travelling in an upward direction from two feet above the ground, struck him at eight yards' distance on the left abdomen about two inches from the

median line and just above the umbilical horizontal line. The shock might thus have been directed through the colon and spleen, injuring both. He fell violently, but resumed work after three hours. The skin was deeply bruised for two or three weeks; the diameter of the bruise was about three inches. Eight or nine months after the blow he began to feel weak; three months later the spleen was found to be enlarged. Gradually quickness of breathing came on. He left his work in March last. When first discovered two years ago the spleen was about half its present size; probably, therefore, it had taken one year to attain that size. It seemed possible that after the blow micro-organisms from within had traversed the damaged intestine and invaded the similarly damaged spleen.

Dr. BAMPTON (Ilkley), in a paper on the Relation of Influenza to Diseases incidental to the Seasons, submitted the following propositions:—1. That we recognise a pure type of influenza. 2. That we meet with influenza *pl·s* the disease peculiar to the time of the year—e.g., influenza *plus* bronchitis, influenza *plus* follicular tonsillitis, or *plus* summer diarrhœa. We have then to deal with compound diseases. 3. We may meet with two specific epidemic diseases running concurrently—e.g., mumps and influenza. We then have to deal with a dual disease, each modifying the other. 4. We recognise the lowering of the resisting power during an attack of influenza, bringing into evidence the disease diathetic to the individual and *vice versâ*. 5. The modern explanation of the classic clinical saying "that in times of epidemics all diseases are apt to assume an asthenic type" is that at such times we have the specific epidemic germ grafted on to the ordinary disease.—The paper was discussed by Dr. BARRS, Dr. DE MOUILLOT, Mr. WOODCOCK, and Dr. CHADWICK.

Mr. WARD read a paper on Excision of the Larynx, illustrated by cases in which he had performed the operation.

The following card specimens and cases were exhibited:—

Dr. ADOLPH BRONNER (Bradford): Lower Turbinated Bones removed for Nasal Obstruction.

Dr. TREVELYAN: A Becker's Microtome.

Dr. BARRS: Spastic Paraplegia; Pseudo-hypertrophic Paralysis; Athetosis.

The PRESIDENT: Case of Gastrotomy with Sphincter formed by the Rectus Muscle; Myomata Uteri removed per vaginam; Multiple Fibroids removed by Abdominal Hysterectomy, with a new treatment of the Pedicle.

Mr. LITTLEWOOD showed a man aged sixty-nine on whom he had performed Supra-pubic Prostatectomy on Aug. 22nd, 1895, removing eleven drachms of prostate. The patient had complete retention with foul urine before the operation; now the urine is clear and is passed every three or four hours during the day and once or twice during the night.—Mr. LITTLEWOOD also showed a specimen of Malignant Disease of the Cervix Uteri removed by Vaginal Hysterectomy. The broad ligaments were very wide, as there was a hydro-salpinx on one side and a small ovarian cyst on the other. These were removed, the patient making a good recovery.

Reviews and Notices of Books.

From Matter to Mind. By MARCUS R. P. DORMAN, M.A., M.B. Camb. London: Kegan Paul, Trench, Trübner, and Co. Pp. 319. 1895. Price 7*s.* 6*d.*

THE origin of mind and its relation to matter have been subjects of discussion from very early times, and the answer of the latest writer whose book now lies before us supplies little information that is in advance of the common knowledge of the day. The author commences by accepting as most probable the theory of Kant that space was occupied originally with countless meteorites, which, attracted by force of gravity to certain centres, formed suns, generating intense heat by the violence of their mutual impact. The fundamental material, or, as the Germans term it, the "Anlage," of such suns we still may see in the nebulæ. When formed a cooling process, by radiation into space, takes place, which will ultimately lead to their extinction. The planets have been formed in the same manner. What led to the first movement of these distributed meteorites? "Gravity," he says, "originally gave rise to heat, and it is extremely probable that heat has since become differentiated, according to Nature's requirements, into all the other forces with which we are acquainted. It has an intimate relationship to light, electricity, mechanical forces, and chemical action, which are all essential to life. It is thus possible, then, that the great force, life itself, at some very remote period was derived from the same source." Why, we may ask, should it have been at some very remote period? Why not to-day?

It is, indeed, in a high degree improbable that life began when the temperature of the world was high. It is far more probable that it commenced at such temperatures as are those now common in the warmer parts of the earth, and at which the lower forms of organic life still live and thrive and multiply best. But we look in vain for any explanation, or even suggestion, of the origin of life—of the essential difference between the living and the not-living combination of atoms which the title of the book might reasonably lead us to anticipate. The conclusions of his second chapter are: that matter consists of elements which are constantly combining with other elements to form compounds; these in turn break up and recombine, always with manifestation of heat; that the properties of the elements are lost in the compound, but reappear when the elements are again set free; and that there is no loss of matter. He then asks, "What is the object, then, of these repeated changes in the elements? The answer is at once apparent—the manifestation of energy and the maintenance of life." So that the author accepts a purely teleological view of inorganic changes. He then proceeds to define energy, distinguishing between kinetic and potential energy, and then discusses organic matter and life. Of the nature of the latter he sums up the chapter in these words: "Living organisms are complex compounds, built up of simple elements. They are possessed with a force called life. This life is dependent upon certain conditions, of which heat, moisture, and nutrition are the chief. The organism has the power of selecting its food and throwing off what it does not require. During its life it has the power of reproducing similar organisms. The length of time the force of life remains in the organism is limited." Alas, in all this we do not find the bridge connecting living with non-living things. A great gulf still separates matter from mind.

Dr. Dorman again takes up a teleological view in regard to plants which somewhat surprises us. "But what," he remarks, "is Nature's object in creating the vegetable world at all?" and his reply is "that animals must have their protoplasm ready prepared for them." Animals no doubt primarily feed on vegetables even in the case of carnivora, and are therefore the outcome of the plant and could not exist without plants; but it is pure surmise to say it was Nature's object that animals should proceed from plants. Several chapters are occupied with a description of the animal kingdom, of the process of development, and of the gradual ascent from the lower animals to man, with incidental sections on Rudimentary Structures and the Origin of Sexes. These are all, though briefly, correctly given.

The second book, which is devoted to the development of the mind, is much the most interestingly written part of the volume. In this the author traces lightly the advances of mental manifestation, from the lower form of animal life to the higher arthropoda and vertebrata. He rightly declines to recognise the distinction so often attempted to be maintained between instinct and intellect, and he thinks the passage easy from the monkey to the man. We should have liked to have gained some insight into Dr. Dorman's ideas on the origin of instinct. Original man, he thinks, when he wanted food, either plucked berries, collected shellfish and blubber, or killed small animals,

his instinct enabling him to detect what was good to eat. But how did the instinct arise? Dr. Dorman proceeds to point out that by the accidental contact of two fluids or friction between boughs of trees fire would be discovered. Shelter being required, he would construct a rude hut. Wood floating on water would suggest it as a means of crossing rivers. The hollow trunk of a tree would be the prototype of a canoe, and the means adopted for the formation of this would lead to the invention of stone instruments. The advantages of sociability would soon be manifest; communities would be established, differentiation of work carried out, and in due course wars arise which may hereafter be settled, not by killing men, at a vast outlay, who are paid at a fixed rate to risk their lives, but by the conflict of mind with mind. The succeeding chapters deal with the further development of the mind, beginning with impressions from simple sensations and pain; reasoning from facts, in the course of which the foundations of Christianity are dealt with, and a thoroughly agnostic view taken of them. There are some sensible remarks on the early training of the intellect, in the course of which Dr. Dorman points out its immense importance. Every subject, he thinks, should be taught from a historical standpoint, and the reasoning powers should be cultivated rather than the memory. The scheme of education he proposes is, however, very large, since it includes comparative philology, history, geography, the elements of science, and the cultivation of poetry, painting, and music. We fear little time would be left for the stimulation of the imagination of the cheerful youth by the habit of "building castles in the air" which Dr. Dorman proposes if each of these were studied on the historical method. Finally, he discusses the nature of the will, and gives chapters to Ethics, Marriage, the Soul, Theosophy, Evolution and the Bible, and Faith. The range of subjects, it will be seen, is rather wide, and though many of them are ably treated within the limits the author has imposed on himself, they might be greatly expanded with advantage.

The Animal Tuberculoses and their Relation to Human Tuberculosis. By ED. NOCARD, Professor of the Alfort Veterinary College. Translated by H. SCURFIELD, M.D. Edin., D.P.H. Camb. London: Baillière, Tindall, and Cox. 1895.

DR. SCURFIELD has done good service in translating into English the little monograph on this formidable malady, written by a most active investigator, who has done more to enlighten the public of France as to the nature and dangers of the disease than anyone in that country, and who must be accepted as a leading authority upon everything pertaining to it, either from a pathological or a hygienic point of view. The subject is of great interest and the highest importance, and because of the dangers attending it in flesh- and milk-producing animals, as well as its extensive prevalence and the heavy losses it occasions, it cannot be too seriously considered and promptly dealt with. In this country, though it is now about twenty years since attention was directed, in a lengthy article that appeared in the *British and Foreign Medico-Chirurgical Review*, to the great risks this disease in bovines imposed on mankind, and though these risks have been abundantly proved to be real and constantly increasing since that time, nothing has been done to check its ravages or diminish its dangers, for the Royal Commission which was appointed some time ago added but little to our knowledge of the disease, nor did it afford much information as to how the malady is to be checked among animals. As is stated in the introduction to M. Nocard's work, there is no disease in existence which attacks so many different kinds of animals. Not one of our domestic animals is completely refractory to it, they simply vary in their susceptibility, and those which under natural conditions escape infection are unable to withstand experimental inoculation. Our poultry-yards, even, are often decimated by tuberculosis; and the tribute paid by man to it is so heavy that in Paris, according to the latest statistics, more than 23 per cent. of the deaths were due to it, and even this high percentage is exceeded in many European towns. But the disease causes the greatest amount of destruction among cattle, though the proportion varies according to the locality, for, while it may be entirely unknown in some places—though nowadays these are, indeed, few—in others it may affect from 10 to 40 or 50 per cent. of the bovine population. In this way it is the most damaging scourge among cattle, and exacts a far heavier tribute than contagious pleuro-pneumonia ever did. Next to cattle, pigs appear to be the most liable to tuberculosis, though in them it is comparatively rare, and still more infrequent in the horse, while it is scarcely ever met with in the sheep and goat—indeed, these animals are markedly refractory to experimental inoculation. Cases of dogs becoming tuberculous when brought into contact with phthisical persons have been reported, and kittens, it is asserted, are easily infected by the ingestion of tuberculous material, particularly milk.

M. Nocard says that when the disease is localised in the pleura or peritoneum, as it frequently is, the Germans and English call it "Perlsucht," or "pearl disease," because the tuberculous nodules of the serous membranes, before they become too old, bear a strong resemblance to pearls. So far as this country is concerned this is an error, as the designation of "pearl disease" is popularly unknown, the masses of tubercle in the situations mentioned receiving the name of "grapes" from the manner in which they are clustered. Hence it is by butchers and others simply called "grapes" or the "grape disease," though it has other vulgar and significant appellations.

The monograph deals with tuberculosis of cattle, pigs, horses, small ruminants, dogs and cats, as well as birds, in separate chapters, and sufficiently in detail to include all important particulars with regard to the lesions, the symptoms, the clinical, bacteriological, and experimental diagnosis, and the various methods of inoculation. M. Nocard insists on the identity of the disease in man and animals, and advocates the employment of tuberculine as an unfailing guide in detecting its existence, even in cattle which give no evidence of being infected. Proof is given of the malady being both infectious and contagious, but the chief cause operating in its spread among cattle is the introduction of a diseased cow into a healthy herd, though an instance is given in which a phthisical cowman infected the cows he attended. With regard to the danger mankind incurs M. Nocard is very emphatic, and he gives cases which undoubtedly were due to accidental inoculation from tuberculous cows; to these cases might be added that of a veterinary teacher who died less than a year ago in this country from acute pulmonary phthisis, presumably due to an inoculation wound in the hand while examining the carcase of a diseased cow. Strong evidence is also adduced by the author in favour of human contamination by milk from affected animals; he therefore energetically insists on the sterilisation of all milk intended for use as food. With regard to the use as food of the flesh of tuberculous animals, he does not go so far as some hygienists, who would condemn the entire carcase of a cow if only a small tuberculous nodule were found in any part of it; he, on the contrary, would permit it to be issued as food if it were of good quality and the lesions were localised. In cases of generalised tuberculosis, however, he would exclude the entire mass from consumption, and he gives his reasons for following both courses. The entire suppression or eradication of the disease from among animals is also, of course, included in the treatise, and there can be no doubt that if the measures the author recommends were adopted and

rigidly carried out everywhere the scourge would eventually be subdued. By all who take an interest in this profoundly interesting matter M. Nocard's remarks should be read and pondered over, for tuberculosis in man and beast is certainly one of the gravest questions, if not the gravest, with which the sanitarian has now, or ever has had, to grapple. Dr. Scurfield has given an appendix of three pages in which the scheme of Professor Bang of Copenhagen, for eliminating tuberculosis from a herd of infected cattle without destroying all of them, is described.

JOURNALS AND REVIEWS.

The Journal of Anatomy and Physiology. Conducted by Sir GEORGE HUMPHRY, Sir WILLIAM TURNER, and Dr. M'KENDRICK. Vol. XXX., Part 1. October, 1895. London: Charles Griffin and Co. Price 6*s.*—This part contains fourteen original articles, viz. :—1. Homoplasty of the Brain of Rodents, Insectivores, and Carnivores. With a Plate. By Gustav Mann, M.D. 2. Clinical Value of the Four-root Theory of the Cranial Nerves. By T. K. Monro, M.D. 3. Optic Nerve as Part of the Central Nervous System. By the same observer. 4. Origin and Intracranial Course of the Ophthalmic Artery, and the relationship they bear to the Optic Nerve. By Edward Fawcett, M.B. 5. Retinacula of Weitbrecht: What is their Function? By the same writer. 6. Lymphadenoma (Hodgkin's disease) of the Lymphatic Glands as a Distinct Pathological Affection. By Gordon Sharp, M.B. 7. Nerve of Wrisberg. By A. Birmingham, M.D. 8. Organ of Jacobson in the Monotremata. With a Plate. By R. Broom, M.B. 9. Effects upon the Testis of Ligature of the Spermatic Artery, Spermatic Veins, and of both Arteries and Veins. With a Plate. By Joseph Griffiths, M.D. 10. Critical Note on Colour Vision. By John Tennant. 11. Note on the Stereophotochromoscope: a New Optical Instrument. By David Fraser Harris, M.B. 12. External Characters and Some Parts of the Anatomy of a Beluga (Delphinopterus leucas). With a Plate. By John Struthers, M.D. 13. Morphology of the True "Limbic Lobe," Corpus Callosum, Septum Pellucidum, and Fornix. By G. Elliot Smith, M.D. 14. Anomalous Muscle of the Thorax connected with the Diaphragm. By Francis J. Shepherd, M.D.

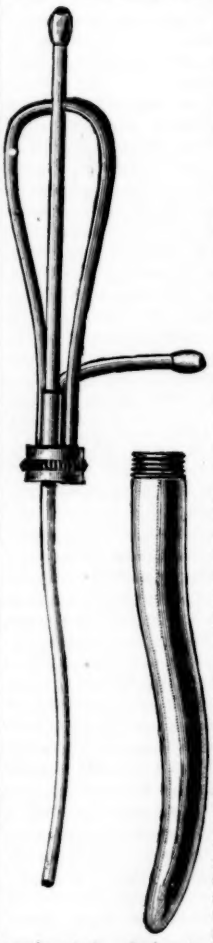
The Journal of Mental Science. October, 1895.—The reappearance of articles by Dr. Nicolson and Dr. Maudsley, after too long an absence from the pages of the journal, renders this number specially interesting. Dr. Nicolson deals with "Crime, Criminals, and Criminal Lunatics." He raises a timely protest against some of the extravagances into which the latest school of criminologists have been betrayed. With all the weight of his authority and experience he points out on how unreal a basis many of the theoretical deductions of the criminologists rest. He objects strongly to applying to criminals generally the biological peculiarities and anomalies found in a minority of the criminal class. Dr. Maudsley, in his lucid article on "Criminal Responsibility in relation to Insanity," also devotes his attention to the subject, and in pungent and powerful satire ridicules the unripe observations and sensational theories in vogue amongst criminologists, which he states "make the judicious grieve although they make the vulgar stare." What may be termed a duel takes place between Dr. Batty Tuke and Dr. Clouston on the respective merits of rest and exercise in the treatment of mental cases. Much can be said in favour of both aspects, but probably Dr. Clouston's advocacy of judicious exercise will meet with general approval. Some interesting information regarding epilepsy is given in the psychological retrospect. The name of Dr. Rayner appears on the list of editors in place of that of the late Dr. Hack Tuke.

The Birmingham Medical Review.—This is always an interesting periodical. In the October number is a paper by Mr. Law Webb commenting on the Immunity from Carcinoma which he has observed among colliers. He suggests that the sanitary habits of the collier—i.e., to wash the outside of the body daily, and never to take any water, save in the form of tea or coffee, to drink—may have something to do with it. Dr. Paul Chapman contributes a useful note on the Misuse of Emollients in Chronic Superficial Inflammation.

New Inventions.

NEW AND IMPROVED FORM OF HOT-WATER UTERINE DILATOR.

THE accompanying illustrations show a new form of uterine dilator designed and used in hospital and private practice by Dr. Geo. Bell Todd of the Samaritan Hospital for Diseases of Women, Glasgow. The instrument may be used as an ordinary Hegar's dilator without the application of the hot-water arrangement. Still, the principle on which the instrument depends is that while in use it may always be kept warm by a stream of hot water circulating through it of a temperature requisite to keep the dilator heated to about 10° or 15° F. above normal.



The set of dilators comprises six graduated sizes, commencing with No. 10 catheter size, and increase in regular proportion. They are made of block tin so that they may be bent into various curves to suit special cases, are thick and stout behind, but gradually taper forwards into a conically pointed end. They all screw into and fit the same handle. The handle is constructed especially for lightness, durability, and cleanliness. It is furnished with a tube marked "inlet," which after running through the fenestrum of the handle terminates in a portion made of softer metal, and extends forwards into the interior of the hollow dilator within half an inch of its point; by this means the current of hot water is led into the interior of the dilator, and makes its exit by the short downwardly curved tube marked "outlet." By attaching a rubber tube to the outlet the water may be conveyed to a suitable vessel beneath the operating table or on the floor. The instrument can be connected with any existing irrigating apparatus such as is usually found in hospitals. The length of the handle gives the operator full command of the instrument, and no boring or awl-like movement is necessary or allowable as with the short-handled Hegar's dilator. By the aid of heat the resistance of the tissues about the cervix is more easily overcome and less force is employed in dilatation, so that there is less risk of rupturing the structures about the cervix uteri. Owing to the tapering shape of the dilators they are not so liable to be caught or gripped by the structures when they are withdrawn as when a cylindrically shaped instrument is used. Dilatation is more easily performed by the aid of heat in cases where it is unsuitable to give an anæsthetic.

Messrs. S. Maw, Son, and Thompson, 7 to 12, Aldersgate-street, London, are the makers of the instrument.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 2, 1895.

WE print in our issue this week the petition of the students of the London School of Medicine for Women to the Royal College of Physicians of London praying for admission to the examinations and diplomas of the College. This petition, as will be seen, is signed by a numerous and influential body of our profession—having, indeed, affixed to it a series of names that would make it impossible for it to be treated with other than deep consideration and respect. And in this spirit, we are glad to say, it was received by the College at the debate which ensued upon it in Comitia on Thursday, Oct. 24th, while the result of the voting must have come as a surprise to more than one Fellow of that ancient corporation. For of 109 Fellows present at the Comitia 50 were found to support the petition. A similar petition has been presented to the Royal College of Surgeons of England, and is set down for discussion in the agenda of the annual meeting of the Members and Fellows of the College on Thursday next, and its fate will be awaited with curiosity. The constitution of the two Colleges is so different that it is possible to conceive the following anomaly—that while the corporations as a whole might be of similar opinion with regard to the petition, it might be amply supported by the governing body in one place and emphatically rejected by that in another. For the Comitia of the Royal College of Physicians of London—i.e., the Fellows in conclave—is a large body, and its vote, more nearly approaching the vote of a plebiscite, would be more inclined to uphold revolutionary courses; while the Council of the Royal College of Surgeons, consisting of a much smaller number of men, much under the sway of tradition and hereditary principle, would for various reasons be more inclined to be reactionary. But before the question comes to the notice of the Council of the Royal College of Surgeons it will have been voted upon at a general meeting of the College, so that the Council will know the views of their electorate before proceeding to discuss the petition.

From every point of view, then, it would seem that the petition of the women is to receive consideration from the Colleges. The Royal College of Physicians has debated the question, and, in an assembly presumably representing the feeling of the highest grade in its corporation, has decided by a nearly equal vote not to admit women to the examinations and diplomas. The vote to be taken at the annual meeting of Fellows and Members of the Royal College of Surgeons will give the medical world an opportunity of seeing what the surgical branch of the profession at large thinks of the question; while the meeting of the Council of the same Corporation will register the views of the oligarchical government of that body. So that, whatever the issue may be and whether it be but a temporary or a permanent settlement of the question, we are glad to feel that the women are to have fair play. There are many arguments—and most of these are familiar to our readers—against the inclusion of women in our ranks. We do not, however, intend at this moment to set them out, but only to say a few words on one much employed in behalf of the petition at the recent meeting at the Royal College of Physicians. The chief argument in favour of acquiescence was that as women have obtained admission elsewhere it was illogical to refuse it to them at the College. This we have no hesitation in saying is no argument whatever. Their inclusion in other bodies is entirely beside the point. It is true that women can win the most coveted medical degree in the profession, and that they can obtain medical diplomas from several licensing boards; but this can have nothing to do with the refusal for the present of the Royal College of Physicians of London to admit them to its diplomas save that the refusal is deprived of much of its sting by the fact that it does not debar the petitioners from proceeding with the profession of their choice. The action of other corporations can only be quoted as a precedent, for or against, by displaying fully the results of the concessions to women; the fact of the concession counts for nothing at all.

And here we will leave the matter as far as the Royal College of Physicians of London is concerned. The Fellows of the College under a judicious and temperate President, with the advice of one of his wisest and most highly honoured predecessors, have decided for the present to reject the petition. They have a right to do so, and have acted from the highest desire to do their duty by the College. To some their course will seem to have been decided by a sentimental desire to hand on traditions merely—for who can imagine HEBERDEN, HALFORD, WATSON, or JENNER sitting in Comitia with women? Others will see in their action a desire to act as they consider rightly without reference to what other bodies have done: and, possibly, with some disregard of expediency. On all hands we hear that the result of the voting has been a matter of surprise. Yet the fact that at least as many are surprised at the extent of the support which the petition received as are surprised at the solidarity of the opposition, would seem to show that the result might have been foreshadowed.

THE event of the academic year is the celebration of the four-hundredth anniversary of the founding of the University of Aberdeen. By the Bull issued by Pope ALEXANDER VI. the "Studium Generale et Universitas Studii Generalis" arose in the then Ultima Thule of learning, and the provision thus made for supplying the north with education, professional and lay, has borne fruit beyond the most sanguine dreams of the social enthusiast. If, in BACON'S memorable phrase, the "Georgics of the Mind" are the fit subject-matter for academic husbandry, they have in Aberdeen given occasion to some of the finest specimens of intellectual "high-farming"—worthy, indeed, of a VIRGIL

to do them adequate justice in song. The industry and sagacity that evolved such harvests from a soil apparently unpromising and under conditions well-nigh desperate are among the most conspicuous triumphs in the roll of national "self-helps." With more than her share of the Scottish love for the liberal arts, Aberdeen from the outset showed her grasp of the educational truth that the training of the mind must precede all professional or specialised activity, and that the more finely tempered, the more vigorously braced the mental instrument, the more will its activity be profitable and nobly prolific. Hence it is that with all her so-called worship of the "knowledge that pays" she has rarely, if ever, been untrue to "knowlege for its own sake." If proof of this were wanted it would be found in the prominence she has always given to the "humanities" in general and to moral and metaphysical speculation in particular—to that kind of knowledge and culture which in spite of its lofty ideal receives but scant attention from peoples who love to call themselves practical. And, like other Scottish seats of learning similarly inclined, she has found the discipline she vouchsafed her *alumni* the best adapted even for the work-a-day walks of life. Just as, according to Sir WILLIAM HAMILTON, the trained metaphysician like DESCARTES or LEIBNITZ found the most difficult problems of the mere mathematician an "easy game," so the student, braced and developed by the *palæstra* of the Aberdonian curriculum, comes to the special studies of law or medicine prepared to grapple successfully with the details or principles of either—thanks to the well-schooled mental equipment with which, again in BACON'S phrase, he "bowed and buckled himself" to the task.

We must go a step deeper, however, in the Scottish civilisation to account for the growth, development, and yield of Aberdeen University. The conditions under which she lived and throve were not exhausted by the Papal Bull. Like every other seat of learning north of the Tweed, she owes much to the educational system of which the inspiring genius was JOHN KNOX. That mighty reformer, in other senses than the religious, grasped the *perfervidum ingenium* of his compatriots in its totality, and his requirement that "wherever there is a parish church there must be a parish school" was calculated to bring up to the universities a perennial contingent of aspirants to the higher culture. Scottish annals, literary and scientific, teem with evidence of the blessings thus conferred on all ranks of the people through generations when other countries had nothing similar to show. The professions were in this way recruited, and university education fed, from social strata which—south of the Tweed, for example—were content to supply the menial service of the *petite bourgeoisie*, and fresh and vigorous blood thus welled up from sources elsewhere practically dry. In the profession of which, more than any other, it may be said "its field is the world"—a profession owing least to locality or tradition, but capable of being practised wherever the *corpus humanum* lives and moves—this outlet for Scottish genius was appreciated from the first in Aberdeen. Medicine, having no articles or irreducible creed like divinity, not bound by statute or precedent like law—open indeed to the practitioner in whatever clime or state he chose to settle—possessed peculiar attractions for the ambitious young Scot and pre-eminently for the young Aberdonian. At nearly every Court in Europe we read of Aberdonian graduates acting as physicians; while in the services—naval, military, and diplomatic—Aberdeen has contributed surgeons, sanitary officers, and consultants out of all proportion to the number of her duly qualified sons. For two centuries and more she has recruited the profession all the world over with men of masculine ability and varied accomplishment, and in that now drawing to a close she has produced names second to none in every department of the healing art. Sir JAMES MACGRIGOR on the Army Medical Staff, Dr. NEIL ARNOTT in medical philosophy, Dr. ALEXANDER KILGOUR in clinical teaching, Dr. FRANCIS ADAMS in medical scholarship, Dr. MATTHEWS DUNCAN in gynæcology, and Sir ANDREW CLARK in consultant practice are, in Baconian language, "instantiæ prærogativæ" in their respective walks, men whom the most august of *almæ matres* might be proud to own.

And the benefits such *alumni* conferred on their University did not stop there. Many of them, in gratitude for the start in life it had given them, endowed it with substantial bequests. Earl MARISCHAL, a hundred years after the foundation of the school, added to its resources the College that goes by his name, and this foundation, after rivalling and stimulating its elder sister for 267 years, has, by Act of Parliament, been amalgamated with the original seat of learning to form the "Universitas Aberdonensis" so honourably *en évidence* to-day. Other adjuncts and subsidies to the efficiency of the school have steadily been added since Earl MARISCHAL'S time, till they have culminated in the splendid extension buildings conferred by the late Dr. CHARLES MITCHELL. Of these we have given elsewhere an adequate account and will at present only say that as conceived and carried to completion they will prove equally honourable to the grateful pupil who gave them and to the *alma mater* by whom such gratitude was inspired. But with this addition to her equipment Aberdeen would be untrue to her enterprising and vigorous past if she rested on her oars and ceased to spread her sails for new voyages of discovery or new expeditions into the scientific unknown. She has rivals, and very formidable ones, with some of whom she is too wise to compete or to do more than silently profit by. "Not wholly in the busy world nor quite beyond it" may, according to the late Mr. MARK PATTISON, be the ideal of a university's situation, and Aberdeen undoubtedly enjoys that advantage. But, as a medical school, what she gains in the peace required for purely scientific study, she loses by the absence of the seething tide of humanity which makes London, for example, the "happy hunting ground" of all clinical observation and research. Indeed, there is no medical school which can be called complete in itself. Each has, more or less, its special feature—local, accidental, or historical—which makes it unique among the fraternity. It is the praise, the high praise, of Aberdeen that,

"Pæne sub Arcturi sidere nata poli,"

she combines so much of all that contributes to make what the old Greek defined as the perfect physician, the τέλειος ἰατρός, and that amid the competition brought about by four hundred years of existence, competition fed by her

own *alumni* transferred to rival seats of learning, she will enter on the twentieth century more vigorous than at any epoch of her history and better equipped to enhance the common standard of professional culture for the honour of the British civilisation and the welfare of mankind.

THE Report of the Council of the Royal College of Surgeons of England deals with the usual variety of topics. It is compounded of the Secretary's report published in the Calendar of the College, reports from the Curator and Librarian, abstracts of the lectures delivered during the past year, together with the returns of the results of professional examinations, a statement of receipts and expenditure (both of these tables being found in the Calendar), and an obituary. With the obituary less trouble has been taken than in preceding years, the names of deceased Fellows only being given, whilst the Members are dismissed with the brief statement that the names of 354 Members have been removed from the Calendar in consequence of death, several of them having died some years ago. As the obituary is omitted from the Calendar it appears to us to be a pity that it should be lopped of its proper proportions, and we trust that next year the names of the deceased Members as well as of the deceased Fellows will be published in the Report as heretofore.

During the year new by-laws dealing with the election and admission of members of the Council, the misconduct of Fellows and Members, and the fees for the certificate in dental surgery have been obtained. The new by-law (Section 4), which simplified the mode of distribution and return of voting papers for the election of members of the Council, came into force before the last election and resulted in a considerable increase in the number of votes recorded by the Fellows. The original form proposed by the Council for the new by-law (Section 16) relating to the misconduct of Fellows and Members was couched in phraseology which appeared to Mr. ASQUITH, the then Home Secretary, to be open to some objection on the ground of its wide and indefinite character. Mr. ASQUITH had been addressed by the Society of Members, who strongly objected to any fresh powers being conferred on the Council of the College, adducing in support of their objection the unrepresentative character of the Council, the manner in which the Council had hitherto treated the Members, the nature of the by-law (Section 17) relating to meetings of Fellows and Members, and the possibility that the Council might apply he phrase "disgraceful conduct" to political actions directed against the government of the College. The Council of the College replied in detail to the letter from the Society of Members to the Home Secretary, with the result that Mr. ASQUITH suggested that the objects which the Council had in view would be obtained by a by-law couched in terms similar to those of Section 29 of the Medical Act of 1858. This solution of the difficulty was at once accepted by the Council, and the incident terminated. As now enacted Section 16 will enable the Council to deal with many cases of misconduct of which, under the limited scope of the former by-law, they were unable to take cognisance, and will remove the disability under which the Council were not infrequently precluded from taking action against Members of the College whose names had been removed by the General Medical Council from the Medical Register for "disgraceful conduct." Section 7 of the Report, relating to the Primary Examination for the Fellowship, is an instructive example of "how not to do it," which might have been copied from the celebrated "Circumlocution Office" of DICKENS. In June, 1892, the examiners in physiology for the Fellowship submitted to the Council a scheme for the practical part of the examination in physiology, but, several changes being made at the June meeting of the Council among these examiners, the scheme was referred back to the altered Board. An amended scheme was submitted to the Council in June, 1893, and this scheme was then referred to the Nomination Committee. In May, 1894, the Nomination Committee and the examiners discussed the scheme together, when it was found that two examiners were in favour of the scheme and two opposed to it. Nevertheless, at the request of the Committee, the examiners drew up a syllabus defining the scope of the proposed examination. The Committee considered the syllabus and visited the Primary Examination for the Fellowship in November, 1894, finally recommending that no change should be made. This battledore-and-shuttlecock method of dealing with the examination in practical physiology, which was kept up for two years and ended in nothing being done, will be found to be the usual mode of procedure in regard to all questions of education or examination which come before the Council. The game is usually triangular, the parties to it being the Council, a special committee of the Council, and the Nomination Committee. Occasionally the medical schools are asked to participate in the exercise. This has been the case recently with regard to the proposed institution of a special examination in ophthalmology, which, according to the Report, is still *sub judice*, and which will probably be dealt with in the Report for 1896 or 1897.

The question of the admission of women to examination at the College, which has arisen out of a memorial to the Council from the London School of Medicine for Women, will be submitted to the annual meeting for discussion before it is formally debated and finally determined by the Council. This question will be submitted in redemption of the Council's undertaking, first made in 1885, to take the opinion of the Fellows and Members in "the larger constitutional questions which more rarely arise." In view of the claims which the Members of the College are putting forward for an increase in their privileges and for representation on the Council of the College, Section 16 of the Report, relating to finance, is a most important one. It comments in detail on the various items of income and expenditure during the past year. The statement itself is taken from the annual report of the Finance Committee; and we are sorry that that report has not been reprinted in its integrity, as the omitted parts related especially to the large decrease in the examination fees and offered some remedial suggestions. So far as it goes, however, it is sufficiently significant and instructive. The expenditure of the College for the year is £376 in excess of the expenditure of the previous year and nearly £750 more than the amount which had been estimated by the Committee, and though there are some heads under which the out-goings for the

current year will probably be reduced there are others under which it will be greatly increased, and the Committee estimate that the expenditure will be heavy. Unfortunately the income of the College is not likely to increase. During the past year it was £537 less than in the previous year, and the main decrease is due to the smaller receipts from the examinations, and chiefly from the examinations for the Membership of the College, the receipts from the First and Second Examinations continuing their downward course. The decrease is partly attributable to the addition of a year to the curriculum of study, which innovation has now been in force for two years; but we strongly suspect that the bulk of it is due to a loss of popularity by the College. The Council will probably soon begin to see that the prosperity of the College depends not upon the Fellows but upon the Members of the College, and that if the institution is to continue to flourish measures must be adopted to attract the rank and file of the profession and to counteract the competition of the universities and other bodies. The needs of the College will be the opportunity of the Members, and it rests with the Members themselves to make the most of the opportunity thus presented to them. A temperate exposition of their claims and a firm, but conciliatory, attitude will tend to enlist the sympathies of the Fellows, of whom not a few are, we have reason to believe, convinced that the Members are justly entitled to a share in the government of the College and to representation on the Council. At the annual meeting, if we set aside the women's question, the course will be clear for the Members, and we sincerely trust that those who speak in their behalf will display that unruffled temper and that calmness and cogency of argument which are worthy of the great and important cause which it is their privilege to advocate.

Annotations.

"Ne quid nimis."

THE STUDY OF LEGAL MEDICINE.

THE Medico-Legal Society of America is an institution of established position in the United States which devotes itself to the advancement of legal medicine. The study is one that in recent years has grown very markedly both in importance and in precision; indeed, these two aspects really represent under different points of view one and the same advance. It is precisely because in recent years the scientific bases upon which it rests have gained in breadth and exactitude that the practical aspect and application of the study have gained in importance. But at this point we pass from the precise sphere of legal medicine and enter those of physical science on the one hand and of jurisprudence on the other. New instruments within the last quarter of a century have opened up new fields of investigation and laid bare new ways of approaching truth, but the discovery of the principles upon which these new inventions rest and their adaptation to the physical uses to which they can be applied are tasks that fall within the sphere of the physical sciences rather than within that of medical jurisprudence. The medical jurist takes these things as data and proceeds to ascertain how they can be utilised in the practice of the law and to what extent they necessitate or suggest improvements in the existing methods of procedure. The same thing may be said of the development of mental pathology. Criminal responsibility and the right to be the custodian of one's own affairs, although matters of profound interest, are too special to be studied apart to any advantage. Both depend upon the general relationship between the individual affected and society at large. All that the student of forensic medicine can do is to apply in this department the results reached by workers whose interest is primarily engaged with the morbid facts themselves, and he must thus be content to walk in the wake of *confrères* who are occupied with the more elementary facts. But in recent years the progress all along the line of scientific investigation and discovery has been so rapid that the difficulty with those who labour in the field of the applied sciences has been to keep the pace and not to make it, and so it comes to pass that the Medico-Legal Society, in common with many kindred institutions, is able to show an excellent record of progress achieved in the region which chiefly engages its attention. It must not, however, be supposed that in pointing out the dependence of legal medicine upon the physical sciences we are in any way disparaging the work of those who have the practical end of improved juridical practice directly in view; on the contrary, we desire to point out that their labours clothe the abstract scientific truths with new significance and harness them to serviceable ends. And in this direction there lie great possibilities of usefulness before the American society.

GOOD AND BAD TEETH.

THAT the tendency to decay of the teeth is in some way dependent on a deficiency of lime salts has often been assumed; it is only lately, however, that crucial investigations can be said to have settled the question. In a series of remarkably interesting articles, concluded in the current number of the Journal of the British Dental Association, on the Analysis of the Teeth, Mr. Charles Tomes records some quantitative estimates of his own and compares them with those of Dr. Black recently published in America. After describing in detail his method of estimating the various constituents of dentine, obtained from sets of teeth in his own possession, Mr. Tomes remarks: "Taking all teeth examined the percentage of lime salts in dentine is 71·9. "I am inclined, however, to think Dr. Black is right in thinking that the percentage of lime salts is not the factor which determines the liability to caries, for in one set of teeth, in which the wisdom teeth were barely in place, two bicuspids had been largely affected, there was incipient caries between many of the teeth, one wisdom tooth was badly decayed, and the incisors were markedly striated transversely; yet this set of teeth gave an average of 71·4 per cent. of salts, whilst another much worn dentition, quite free from any trace of caries, also gave 71·4 per cent. of salts; that is to say, both were 0·5 below the general average." It must certainly come as a surprise, not merely that teeth which we recognise as types of vigorous, healthy formation should be no better off in lime salts than those presenting all the signs of liability to decay, but, moreover, that teeth worn down by attrition, in which it has been assumed an extra calcification has taken place, should actually be below the average percentage of lime salts. Another curious outcome of these investigations arose from a statement by Dr. Black that there were differences in the amount of mineral matter in teeth taken from the same individual. Mr. Tomes, in confirmation, adds: "But I also find an unexpected fact which is of much interest. The differences are not fortuitous, for I have found that the incisors and canines uniformly contained a smaller portion of mineral matter than

the molars." He gives the proportion as follows: incisors, 71·2 per cent. inorganic salts and 28·8 per cent. organic matter and water; molars, 73 per cent. inorganic salts and 27 per cent. organic matter and water. This further appears to support the view that the proportion of lime salts is not a chief factor in the production of decay, for the molar teeth are certainly more prone to decay than the incisors, although according to these figures the former are richer in lime salts than the latter. Mr. Tomes has promised to carry his investigations further; meanwhile he suggests that "the difference between good and bad teeth may lie in the amount of combined water, in the proportion of calcium carbonate, in the nature of the organic matrix, or, finally, it may not lie in the dentine at all, but may be a difference in the enamel."

"POPULAR REMEDIES."

THAT the general public are taking an increased interest in medical matters is shown in many ways. Current literature is full of the subject, and the medical element in the modern novel has been referred to in these columns on several occasions. The stage, too, often puts before the public studies in which morbid processes both of mind and body occupy a conspicuous position, and the daily press displays an avidity for the latest cures of incurable diseases. This is the burden of Dr. Nestor Tirard's excuse for taking "Popular Remedies" as the subject of an address which he delivered on Monday last before a lay audience at King's College, London. Dr. Tirard laid most stress on the folk-lore aspect of the subject, and from this point of view there is a wealth of interesting material, humorous and instructive, which might well occupy the attention of both the lay and the medical public. Many of the old popular remedies, while absurd in their composition as a whole, contained one ingredient which undoubtedly possessed a therapeutic value, and the other components of the remedy were introduced merely to minister to that innate craving of humanity which is for ever seeking after the rare or mysterious. On the other hand, the principle of faith-healing no doubt underlies the old recipes which contained drugs and things of no known therapeutic value whatever. General attention to diet, exercise, sleep, and the use of hot and cold water internally and externally, and a "return to the ways of physiological righteousness," may do much to cure diseased states of the body. All these things were done or brought about if the patient religiously followed out the instructions in many of the old prescriptions; for, amongst other things, the patient had often to collect the ingredients composing the prescription himself, and this would frequently entail early rising (for some plants had to be gathered early in the morning); and active exercise where the object sought was rare and difficult to obtain. The aspect of the subject, however, which will most interest our own profession is that which the lecturer touched upon when speaking of modern popular remedies as exemplified in the growing fashion for using Murphy's Merciless Mixture, Pongo's Puerile Pills, or Pudge's Pungent Plasters. As when we hear a tune played for the first time on a street organ we perhaps take no notice of it, and later, hearing the same tune again, we recognise it as the tune we previously heard, and hen by-and-bye the catchy air has so insidiously worked its way into our brain that we catch ourselves humming some music-hall song of which we do not know the words, and if we did should not, probably, give utterance to them, so the alliterative titles of the specious patent medicine advertisements play upon the mind of the public until familiarity brings about the desired object of the advertiser. Another cause which the lecturer thinks contributes to the popularity of these nostrums lies in the growth of medical knowledge. The young medical men of the day, believing the cure of certain morbid conditions of the body to be hopeless, instead of attempting to battle with these conditions, tell their patients that nothing can be done for them. And here is the opening for the nostrum dealer, who promises everything and whose statements are always positive and never negative. The popular remedies of a nation also afford some index of its health and habits, and, in spite of the views often expressed in works of modern fiction, the moral health of this country has of late been essentially respectable, for an analysis of the drugs used in prescriptions for the past ten years shows that tonics, stomachics, and such-like drugs are of far more frequent use than preparations of mercury and iodide of potassium.

BATHS AT BATH.

SOME friction has been caused by the management of the baths at Bath. The committee a few weeks ago, at the suggestion of a well-known physician, decided to introduce the "Thermalsoolbad," so that patients could have this method of treatment without the trouble and expense of going to the Continent. The committee passed a by-law as to the use of the bath which was thought to be somewhat stringent, and most of the medical practitioners of Bath felt themselves aggrieved at this. Some of the inhabitants, too, are complaining of the extra expenditure at the baths, but as these form the chief attraction of the city the majority of the residents will not hesitate to keep their baths up to the highest state of perfection. There is only one member of the medical profession on the Baths Committee, which is certainly not sufficient, considering how many medical men in Bath are interested in the baths and have patients using them. If the profession had been more fully represented on the committee the friction alluded to in all probability would never have occurred.

"MORAL PATHOLOGY."

WE are coming to speak of a modern science of ethics as of some new revelation, and such in a sense it is. In the same way we talk of a new planet. Both, in fact, are ages old, but are now for the first time explained to us by a new interpretation. There nee be no surprise, therefore, when we find that many suggestions and assertions made in our own day on the authority of original thought and observation have long ago found expression in other phrases, whether these be the maxims of daily practice, the records of independent reflection, or the accepted doctrine of sacred writings. To explain these truths anew in the language of cause and effect is not, therefore, to teach them for the first time, but to corroborate them by establishing their essential connexion with other facts of life. Ethical science thus becomes a reconciler of opinions respecting the natural and what we have known hitherto as the supernatural. Its teaching goes far to verify the real unity of terms apparently so diverse and to show that the laws of action to which they are related are often, if not always, virtually identical. Recent literature has repeatedly furnished us with suggestions illustrative of this unity. The processes of biology, social usage, and morality have again and again been proved to follow similar lines of action, and this resemblance is, perhaps, nowhere better seen than in the parallel changes observed in physical disease and moral disorder. We have before us an interesting contribution to this subject in a handbook on "Moral Pathology" by Dr. Arthur E. Giles. In a series of brief chapters he traces the progressive effects and variations of moral evil from its probable origin in some act of bodily indulgence—some "fall" of the man, or rather of the child—through further developments to the more or less complete deformation of character. The analogy

between moral wrongdoing and disease is carefully and closely followed throughout, and is described with force and clearness. The moral physician, in order to treat successfully the complex forms of soul sickness with which he has to do, must, as is truly said, be equally well endowed with insight, sympathy, experience, and the influence of personal example. A chapter on moral diatheses will instruct very many. The right use of egoism as a motor of good actions is worth noting, so also is a chapter on the causation of moral disease. We have been particularly attracted to the observations on selfishness; in opposition to this vice we seem to find the clue to a perfect reformation. Dr. Giles's preference for healthy altruism as a remedy rather than for merely negative self-sacrifice will commend itself to most readers. It is encouraging to find that even in a study so sombre as moral pathology we are in sight of a hopeful prognosis. Moral death, it is maintained, is unknown to man, though a species of soul coma is not. Recovery is always possible, provided that the will, captive to evil, be aroused to efforts of release by a stimulus of sufficient power. The remarks on treatment, though necessarily short in a work professedly descriptive of disease, are characterised in an eminent degree by friendly wisdom and practical good sense. In particular we may notice three: (1) that careful moral training should begin in childhood; (2) that such instruction should at any age and as far as possible be individual rather than general; and (3) that in order to succeed it must be sympathetic. Such rational suggestions as the above are of happy augury when we regard them as expressing the active purpose of the new and yet primeval science of ethics.

TUBERCULOSIS OF THE BONES, MUSCLES, AND EYES OF CATTLE.

IN the inspection of the carcases of animals destined for the food of mankind something more is necessary for the detection of tuberculosis than a cursory examination of the lungs and lymph glands, as the lesions are sometimes observed in the hard tissues and muscles, which are not usually cut into for investigation. In a German periodical devoted to the hygiene of flesh and milk the remark is made as to the comparative infrequency of tubercles in the flesh of cattle, and especially in the myocardium. In the latter situation only one instance had been observed until recently; this was in a cow which had very extensive tuberculosis of the pleura, and in the wall of the right ventricle there was a tuberculous mass as large as a bean. Not long ago at the Leipzig abattoir a calf six weeks old and in good condition was slaughtered, and on dressing the carcase it was found to be affected with generalised tuberculosis—the lungs, pleura, and lymphatic glands of the neck, chest, and abdomen, as well as the liver, spleen, kidneys, &c., being involved. On the right side of the heart, near the surface, and only separated from each other by a thin muscular partition, were two masses of tubercle, each as large as a hazel-nut. One was embedded in the wall of the left ventricle, near the auriculo-ventricular groove, and the other at the apex of the organ, on the middle of its anterior surface. Another veterinary abattoir inspector had some time ago discovered a case in which there was tuberculosis of the sternum, the elbow-joint, and the pectoral muscles. More recently he has met with another instance of muscular tuberculosis, which was apparently not primary, but consecutive to tuberculosis of the cartilage of the seventh rib. The latter was completely destroyed at certain points, the remaining portions containing yellow, rounded, cup-shaped nodules, which when removed left circular cavities that neither in colour nor appearance could be distinguished from normal cartilage. Around the diseased cartilage there were seven small abscesses, one of which was open; the pus in these contained the tubercle bacillus. The cow was the subject of thoracic and abdominal tuberculosis. There are a number of cases of ocular tuberculosis in the ox recorded in veterinary literature, and among the latest are two described by Herr Winter of Bromberg. The first case was that of a four-year-old Dutch cow, which was so stupid or stupefied as to be insensible to the voice and to blows. At its necropsy generalised tuberculosis was noted, the pleura, lungs, peritoneum, lymphatic glands, liver, kidneys, ovaries, and udder, as well as the brain and its coverings, being diseased. The cornea of the right eye was opaque, bluish-grey in some places and bluish-black in others. Near the internal angle there was a prominent mass formed of lenticular tubercles, and the sclerotic also showed pyriform and lenticular projections that appeared to come from the interior of the eye. At the junction of the cornea with the sclerotic there was another mass of the diameter of a 50-centime piece. The interior of the ocular globe was fully occupied by a caseous mass, bright yellow in colour, semi-fluid, and containing calcareous particles. At the papilla of the optic nerve the retina was separated from its deeper layer by cheesy tubercles; the prominences seen on the outside of the sclerotic were found to be situated between that and the choroid coat, and were calcified in some places and puriform in others. The crystalline lens could not be recognised, and the iris was confounded with the cornea. By the aid of the microscope tubercle bacilli were found everywhere. The other case was that of an emaciated cow also affected with generalised tuberculosis. The right cornea was turbid and of a dark-blue tint; at the margin of the sclerotic there were several yellowish tubercles each about the size of a lentil; the vitreous humour was muddy and opaque, but the retina and crystalline lens were normal. The posterior surface of the iris was partially adherent to the lens by a thin white layer, and on its anterior surface there were nodules which could be seen through the cornea, with yellow miliary tubercles grouped in tufts or in grape-like masses at its lower border where it joined the cornea. In all these neo-formations the tubercle bacilli abounded.

WHEN IS SKIMMED MILK NOT SKIMMED MILK?

MR. HADEN CORSER, the magistrate at Clerkenwell Police-court, expressed himself in the following terms last week on the occasion of a summons against certain refreshment-room proprietors for selling to their customers milk from which the fat had been abstracted to the extent of 15 per cent.: "I am sorry my judgment is bound by the case which has been decided in a superior court. I consider the section referred to was passed to prevent wholesale milk-sellers or retail dealers from skimming off the cream and knowingly selling poor milk. I am bound by the decision of the higher court, although I am convinced an injustice has been done. I am bound to do an injustice in this case because a superior court orders me to do it. I shall impose a fine of 6*d.* and the cost of the summons." Mr. Haden Corser urged, as the basis of these remarks, that if milk were put in a pan the cream rose to the top and the early purchasers got it, whereas if it were sold from an urn with a tap those who came last received all the cream. But what if the milk had been skimmed before it was put in either of these receptacles? We want to make no imputation, but we cannot gather a particle of evidence that such was not the case; at any rate, such a case could easily occur. What an excellent loophole of escape, then, would Mr. Haden Corser's judgment afford. The milkman or vendor would only have to say that his milk was put in a pan and the cream rose to the top, and the early birds—no, the early purchasers—got the cream, or that the milk was sold from an urn with a tap, and those who came last received all the cream. In Mr. Haden Corser's

judgment this is good defence, so that the only question to be decided is, What kind of vessel was it from which the milk was poured? The cream, however, or the bulk of it, may never have been put in, be it pan or urn. We are not sorry, as Mr. Haden Corser was, that in this case his judgment was bound by a similar case which had been decided in a superior court. The occasional use of a stirrer would have obviated the necessity of bringing the case before Mr. Haden Corser at all, granting, of course, that the cream had been there.

THE EDIBLES AT COUNTRY FAIRS.

A DEATH and illnesses which occurred recently at East Liss, on the eastern borders of Hampshire, seem to point to the need of a more stringent inspection by sanitary officers of the edibles sold by itinerant stall-keepers at country fairs and feasts. A labourer bought some fried fish at a stall at Petersfield fair which made him very sick. He went to work as usual next day, but was very ill, and returned to his lodgings, having lost the use of his limbs. A medical man who was called in found every symptom of poisoning, and the necropsy confirmed the opinion that the death was due to the diseased fish which the man had eaten. Several instances of slight illness included the experience of another labourer, who ate very little of the fish he bought, as it "tasted so unwholesome." The police were unable to trace the vendors in this case, but a prior inspection of the barrows might have obviated a fatal result. It is, perhaps, a matter of wonder that we hear of so few fatal illnesses contracted from the consumption of the contents of the evil-smelling and dirty conveyances of peripatetic costermongers.

THE ISLINGTON INFIRMARY.

WINTRY weather has set in this year somewhat earlier than its wont, and with it has come the usual influx of patients into the metropolitan Poor-law infirmaries. A few days' frost or fog seriously interferes with the out-door employments on which so many of the unskilled London workers depend, pulmonary and rheumatic troubles show themselves, no money can be earned, and the relieving officer is the only resource. The poor also know that in time of sickness they will have in the infirmary good accommodation, food, nursing, and medical attendance, a combination of benefits unattainable in their own homes; and the natural consequence is that these applicants for what is primarily medical relief are sometimes so numerous as to cause anxiety to the parochial authorities. There is every prospect that the Islington board of guardians will have a difficult problem to solve during the next two or three months. The parish contains more than 300,000 inhabitants, and as early as the middle of October the inmates of the workhouse and infirmary largely exceeded the regulation limit. According to the official certificate the workhouse can accommodate 781 persons and the infirmary 473; but, as a matter of fact, there were 595 patients in the infirmary on Oct. 13th. Now these are not, as a rule, chronic infirm patients, lingering out their last years and in but slight need of medical attendance; on the contrary, this infirmary is a busy hospital, into which during the present year 1365 patients were admitted from Jan. 1st to May 7th, and 236 deaths occurred during the same period. This gives a weekly average of nearly 76 new admissions and 13 deaths, and some of our readers will hear with surprise that the labour and responsibility of bestowing due attendance and care on this aggregation of suffering humanity are shared between only two medical officers. A little computation will show that these gentlemen can hardly give more than a brief consideration to individual cases, and as far back as last July steps were taken by the guardians to create a third medical appointment, but when the day for selecting a candidate arrived the guardians changed their minds and decided that an additional medical officer was unnecessary. The question of providing further accommodation for the sick and destitute cannot be solved in this easy manner. Apparently the guardians hope to surmount the present difficulty by resorting to extemporised structures, but there is no reason to suppose that the winter admissions of sick and destitute persons will be less in the future than at present, and the wisest policy would no doubt be the prompt construction of a new infirmary on a site sufficiently spacious to permit the erection of such additional buildings as may from time to time be required.

BRAVERY.

"HEROISM without risk" was the motto of Mr. Gilbert's band of brigands, but the heroism that is attended with risk is widely exemplified in this (Thursday) morning's papers. The death of Fireman Sprague is a sad comment on the dangers encountered in coping with a fire, and the valour displayed by him and his companions is by this time known throughout the land. Women, too, are not laggards in bravery. The *Times* reports that the Royal Humane Society have just presented three ladies—Miss K. Gelling, aged sixteen, Miss Violet Ponsonby, aged eighteen, and Mrs. G. Anderson—with testimonials for saving life. The last-named nearly lost her life in saving a boy who was bathing at Sherringham; Miss Gelling saved a boy bathing at Castletown; and Miss Ponsonby swam out, fully-clothed, into the Cookham rapid and saved a lady who was upset from a canoe. These ladies are to be congratulated on their pluck and the success which attended their efforts.

THE FACIAL NERVE AND LACRYMAL SECRETION.

IN a recent number of the *Deutsche Medicinische Wochenschrift* Dr. Franke of Greifswald makes some remarks with reference to the anatomical, physiological, and experimental evidence regarding the nerve controlling lacrymal secretion. Krause's conclusion that the trigeminus has a decided influence on this secretion and that the facial also takes some part in its control is alluded to. The evidence for this lay in the fact observed by Krause that complete extirpation of the Gasserian ganglion did not cause a complete cessation of tears in the eye on the side on which removal had taken place. Dr. Franke is inclined to refer this effect, however, to injury to the greater superficial petrosal nerve. The patient whose case Dr. Franke describes showed complete paralysis of the left side of the face with only slight secretion of tears on the affected side, although the trigeminus was intact. His view is that the facial nerve is the nerve of the lacrymal gland, and that disappearance of the secretion is determined by a lesion of the facial nerve either involving the geniculate ganglion or an even more central part.

THE DELMAR CHARITABLE TRUST.

MR. F. O. T. DELMAR of Bayswater, who died on Oct. 14th, has left £100,000 to his trustees to form a fund to be called the Delmar Charitable Trust. Nine-tenths of the annual income from this fund is to be divided between selected charitable institutions in London or its neighbourhood, "having regard to the relative importance and magnitude of each institution." The testator expresses his desire to benefit in particular the establishments for the care and treatment of epileptic and cancerous patients and the Royal Society for the Prevention of Cruelty to Animals. It is to be hoped that the trustees in their wisdom will select for the benefit of this bountiful bequest those institutions more especially which

have been established long enough to have a record of ably administered benevolence, as this is the surest guarantee that the charity has gained the confidence of the public. The Cancer Foundation of the Middlesex Hospital stands almost alone in this respect, and certainly deserves a substantial share of such support as the trustees can legitimately divert to it. Founded in 1792, this permanent refuge for victims from cancer still shelters the sufferers until "relieved by art or released by death," and the present is a peculiarly appropriate time for rendering it pecuniary assistance. His Royal Highness the Prince of Wales presided last year at a festival dinner to raise funds for providing a separate building for patients suffering from incurable cancer, and up to the present time a sum of over £8000 has been subscribed. But the building will cost at least an additional £4000, and further donations to the endowment fund are earnestly invited by the governors of the charity in order to maintain these poor afflicted people in comfort and thus relieve a severe strain upon the general funds of the hospital.

THE WATER-SUPPLY OF HIGH BUILDINGS.

THE immense height of the colossal office and business buildings in the lower part of New York, where there are scores of buildings ranging from twelve to twenty storeys high, is, says the current issue of the *Leisure Hour*, bringing forward a serious problem in connexion with water-supply. New York has an excellent water service from its great reservoirs at Croton, where its waterworks compare with those of any of our own large cities. The water service gave satisfaction until the era of twenty-storey buildings began. Since then owners and tenants of these tower-like structures have been complaining that they are never able to obtain water on the upper floors. The difficulty principally affects buildings of more than fifteen storeys. The owners of the buildings recently formed themselves into an organisation and deputed a committee to discuss the position of affairs with the mayor. It was then made plain that the fault was not entirely with the supply of water. That was sufficient to meet the needs of these tall buildings. The water could be forced into the topmost storeys of them; but to do so would demand a pressure which would wreck the water fittings in at least seven-tenths of the other buildings and dwelling-houses in the city.

THE DANGERS OF DUELLING.

ALTHOUGH in the great majority of cases duelling with the sword is not nowadays a very serious affair, the wounds inflicted being generally of a trifling nature and by no means dangerous to life, still occasionally, and especially when one or other of the combatants is a tyro with his weapon, graver consequences may ensue, and the contest which for the most part is regarded as a formality becomes converted into a fatality. When the pistol is the weapon employed for the adjustment of disputes, it would at first sight appear as though the risk of the encounter was considerably augmented; but experience has proved that the firearm is a far less lethal instrument of offence than what our Gallic neighbours call *l'arme blanche*. This, no doubt, is owing to the fact that ninety-nine men out of a hundred are excessively bad shots for want of practice, being unable, as the saying is, to "hit a haystack flying." In the early years of the present dying century pistol shooting was an essential portion of every "young blood's" education, and none were considered proficient until they could hit the ace of hearts at sixteen paces, but happily the barbarous practice has now completely died out even on the Continent, where duels are not yet quite defunct. The foregoing reflections have been suggested by a sad occurrence which recently took place in Corsica. In consequence of a newspaper article Dr. Alessandri, a retired naval officer, challenged the editor, whose name is Benedetti, and a duel with pistols was the result. Shots having been exchanged at thirty paces without effect, the weapons were reloaded, and the combatants once more confronted each other. The signal was given, two shots sounded as one, and the unfortunate Dr. Alessandri fell to the ground with a mortal wound in his right side, from which he shortly afterwards expired. Death was almost instantaneous, being due, as was shown subsequently at a post-mortem examination, to a severed pulmonary artery. The deceased, who was a Chevalier of the Legion of Honour, had seen a considerable amount of service. As the President of the General Council, who pronounced the funeral oration, said: "It was heart-rending that a distinguished surgeon, who had passed without a scratch through several campaigns, should fall a victim to hazard in a paltry encounter which owed its origin to the rancour of political passion."

THE INTERCOMMUNICATION OF HUMAN AND ANIMAL DISEASES.

IN our correspondence columns is published a letter from Dr. J. W. Allan suggesting the formation of institutions where the intercommunicable diseases of man and animals could be practically investigated. There can be no doubt as to the importance of such investigation so far as mankind is concerned, for the human species incurs much more risk of danger from the existence of communicable disorders in animals than do animals from such affections in human beings. However desirable it may be to have such investigations thoroughly carried out, there are grave obstacles to be encountered in founding such establishments, the first and most important being the provision of money. It is almost certain that the Government will not provide it, and it is to be feared that private benevolence cannot be relied upon to achieve this object. So that it is to be apprehended we must rely upon the establishments we already possess for the investigation of allied subjects, such as the histological and pathological laboratories of the medical and veterinary schools, and special foundations like that of the British Institute of Preventive Medicine, to afford opportunities for learning more of these transmissible diseases. There are now many labourers in this field, both in this country and abroad, and it must not be forgotten that the Local Government Board has for many years past spent considerable sums of money in the investigation of those disorders of animals which can be conveyed to man. With regard to the suppression of these diseases it has also to be remembered that medical opinion is, at least, as regards some of them—rabies and glanders, for instance—ahead of public and legislative opinion.

AMERICAN VIEWS OF ANTISEPSIS IN MIDWIFERY.

THE *New York Medical Record* of Oct. 5th gives an interesting report of a discussion on the importance of asepsis in the practice of obstetrics at the Medical Society of the County of New York, in which a comparison is made between the methods and results of aseptic and antiseptic midwifery as practised in four city institutions and the same in the private practice of four physicians. In the institutions the mortality was about one-eighth of 1 per cent., while in the practice of the physicians it was one-fifth of 1 per cent. The chief difference in the methods was that in the hospitals the vaginal douche was practised before and after labour and the pubes were shaved. The latter seems to us a very questionable procedure, and the vaginal douches are only less so. As to the great points of aseptic towels, cleaning the genitals, washing in the antiseptic sense the accoucheur's hands, there was a general consensus of opinion,

and it is obvious that any practitioner who neglects thoroughly to wash his hands and nails and to preserve the asepticism of his clothes is not doing his duty to his patient. The private practitioner must not allow his success to fall below that of the public institutions. Dr. Reid, the writer of the paper, while not objecting to the details of hospital asepsis, did not think all of them necessary. Dr. Tucker was glad to hear a private practitioner express the opinion that milk fever was septic. He himself thought it usually so, not always. Dr. R. A. Murray emphasised the importance of personal cleanliness in the physician. "When the physician kept himself and his hands clean he did not have sepsis, no matter what the surroundings of the patient." Dr. Reid had had but one death from sepsis in his last 458 cases. Dr. Thomas Darlington as a private practitioner made not the least interesting contribution to the discussion. In country or sparsely peopled districts he frequently found none of the amenities of antisepsis. Soap, boiled water, or water of any kind (!), were conspicuous by their absence. His success was the record of the debate. "He had confined nearly 1000 women and had lost none from any cause. Whenever there was sepsis he believed it came from the physician. He carried bichloride tablets to wash his hands. He thought the vaginal secretions helped the passage of the head and that the douche retarded it." There is a ring of common sense about these last remarks which will impress them on private practitioners and fasten on them the responsibility of clean aseptic hands.

A CHILD'S RIGHT OF ASYLUM.

IT is to be hoped that we have not yet heard the latest explanation of a case of cruelty recently decided in the Marlborough-street Police-court. A child, after being grievously maltreated by her mother, had been removed to the shelter of the Society for the Prevention of Cruelty to Children. The mother, fearing prosecution, endeavoured to resume possession of the child, but was prevented on the request of the latter by the society's officials. It will be remembered that special provision is made by the Acts relating to this form of cruelty for such an appeal as this, and also that officials in charge of the society's shelters are entitled to give it effect. Naturally, therefore, many persons have been surprised by the announcement that a stipendiary magistrate of recognised ability has taken an exactly opposite view of the merits of this case, has denied the legality of the society's action, and has insisted on restoring the child to her mother's keeping. We confess that after a careful examination of the facts upon which it is founded the justice of this decision entirely baffles our comprehension. It would be interesting to learn what form of sanction can be pleaded in its support. So far none is evident, but, on the contrary, the process of justice and the practical utility of the Acts appear to be hopelessly irreconcilable. If, as would seem to be the case, the right of appeal conferred upon children subjected to ill usage cannot be exercised without a near prospect of parental retribution, it is obviously a right of merely nominal value.

SHAMS.

MR. WILLIAM BENJAMIN DAVIES has recently been fined £22 4*s*. for infringing the Medical Act by falsely taking and using the title of a surgeon. According to his solicitor, Mr. Davies had gone through the usual medical training up to the final examination, from which he withdrew, so it is quite possible that his medical knowledge was fairly good. But he represented himself as being what he was not, and richly deserved his punishment. His offence is only too common nowadays in every department of trade. You ask for bread and butter and get presumably bread—though no one has yet defined what bread is—and certainly margarine. It is fair to state that in a recent case the purchaser was told beforehand by the vendor that he would get margarine. Ground coffee is openly sold as a mixture of chicory and coffee. It is useless to say most people like it so—ninety-nine out of a hundred English people do not know what coffee is. In an evening contemporary was recently printed a prize menu for two people to last a week; among other items was a quarter of a pound of coffee, price 4*d*. Conceive the infusion made from four ounces of coffee at 1*s*. 4*d*. a pound to last two people a week; but this kind of wash is the average housewife's notion of coffee. A return to the methods of our ancestors—the quack paraded through Cheapside with a collar of "jordans" round his neck, the adulterator, whether wholesale or retail, in the pillory at Charing-cross, with his falsely named goods at his feet—would go a long way towards purifying money-getting and preventing robbery. An even more stringent punishment than these is on record, the case being that of a falsifier of wine, who, being compelled to drink some of his product, died. Perhaps if this was carried out in every case the effects would be too uniformly fatal, but the suggestion is one to be borne in mind.

CEREBRAL TUMOUR AND HYDROCEPHALUS.

DR. DINKLER recently published in the *Deutsche Zeitschrift für Nervenheilkunde* a case of more than usual interest, both in its clinical course and in the nature and extent of the morbid conditions which were present. The following are the particulars. A child, without any hereditary morbid tendency so far as could be discovered, was seized in his third year with a vague illness, from which he speedily recovered. About four months before his admission, being then of the age of four, he was found to have distinct weakness of the upper part of the body and head, the weakness being revealed in sitting, standing, or walking. He also apparently lost control over bladder and rectum. He was found to have a fairly big head, sluggish pupil reactions, swollen discs on each side, weakness of the right side affecting the face and limbs, normal sensibility, and an increased knee-jerk on the right side. After a few days there were sickness, somnolence, and finally loss of consciousness; after four weeks an epileptiform attack occurred, with twitchings of the left side of the body, and there were increased reflexes on both sides, and after three months paresis of the left leg and an increase in the circumference of the head. On each side there was distinct optic neuritis. On account of the increasing size of the head puncture of the dura mater was performed between the third and fourth lumbar vertebræ, and a large quantity of fluid was withdrawn. The pulse, however, again became slow and finally irregular, and death occurred seven months after the patient came under observation. The diagnosis which was arrived at was one of cerebellar tumour with hydrocephalus, but at the necropsy it was found that there was a huge tumour of the *right* cerebral hemisphere besides severe internal hydrocephalus. Microscopical examination revealed a high degree of degeneration of the *left* cerebral cortex and atrophy, through pressure, of the right parietal lobe. There was no degeneration in the cerebellum, pons, or peduncles, but in the spinal cord the posterior columns and roots, from the cauda equina to the first cervical nerve, were very much degenerated. The following is Dr. Dinkler's view of the connexion of the lesions and clinical phenomena. The illness at three years of age had as a sequel internal hydrocephalus. Then, in consequence of the advent of a tumour in the neighbourhood of the right supra-marginal gyrus, the symptoms of intracranial pressure were developed—choked disc, headache, and vomiting. The tumour compressed the hydrocephalus on the right side, causing an

enlargement of the ventricle on the left, which led to atrophy and degeneration of the cortex on this side. In consequence of this right-sided weakness resulted, while an extension of the tumour on the right side over the Rolandic area gave rise to weakness as well on the left side, so that before the end there was a condition of double hemiplegia. The main points in the case are the presence of the usual symptoms of cerebellar tumour and the absence of any affection of the cerebellum, and the degeneration of the posterior roots and columns associated with a central lesion. The explanation of this latter condition is by no means obvious.

THE CASE OF MISS LANCHESTER.

ON Friday, Oct. 25th, a Miss Lanchester, whose "views" on the subject of marriage are now public property, was forcibly removed upon an urgency order to an asylum. On Tuesday, the 29th, she was released by order of the Lunacy Commissioners. In the interests of the medical man or men who signed the certificate, no less than as regards the question of the liberty of the subject, an inquiry into all the circumstances is imperatively demanded, and we hope that the proper authorities will promptly initiate such an inquiry.

A DISASTROUS GAS EXPLOSION.

THE past twelve months have been remarkable in bringing into ugly prominence the defects that may happen, and that may be productive of very serious results, in connexion with all three of our service supplies—gas, water, and electricity. It was about this time last year that we were confronted with the dangers of explosion in the street boxes of the electric mains, later (in February) the water mains were frozen, and when the thaw set in the pipes were fractured and several districts were without a regular service for many weeks. To complete an unfortunate trio of disasters a defective gas pipe has now been the means, it would appear, of a sad and most serious occurrence. It happened on Tuesday evening last, in a busy court in the Strand leading to the closely populated district of Clare-market and directly opposite Somerset House. An escape of gas had been noticed in the court for some time, certain repairs had been executed by the gas company not long ago, and on the very day of the explosion men had been employed to make good the pathway. In one or other of these operations it is possible that a defective repair was made, or that a good repair was damaged and converted into a serious leak again by the filling in of the gap and by pressure being probably brought to bear upon the stones or similar materials in making up the hole. With the earthy stuff saturated with gas as it must have been from the previous leak, the fact of a strong smell of gas would not give rise to any suspicion of a fresh leak. It is not difficult to imagine as a consequence that the escaping gas then gained access into and accumulated in the cellar of a house immediately opposite, where it only required a light to produce a terrible explosion. So terrible was the force of the explosion that ensued that a house of three or four floors collapsed completely. During the work of a most plucky rescue amongst the scattered débris an adjoining house fell literally to pieces, burying two firemen, one of whom escaped with slight injuries, while the other remained unextricated for ten hours. He was eventually rescued and taken to King's College Hospital, but the poor fellow succumbed to his injuries. In all, some thirty-one persons were injured, but no other loss of life was reported. We understand that Colonel Majendie has inspected the scene of the disaster with a view to ascertaining its precise cause. Though there seems little doubt that the disaster was due to a considerable escape of gas, it is stated by an evening contemporary that there appears to be a suspicion that some miscreant had been connected with the occurrence, for the authorities of Scotland Yard have been very active in obtaining full particulars. We sincerely hope that any suspicion of this sort will prove to be entirely unfounded.

THE LATE MARK MORRIS.

ALL St. Bartholomew's Hospital men will hear with unfeigned regret of the death of Mark Morris, the steward to that hospital. He was, and had been for many years, so widely identified with the working of the institution that his loss will be, perhaps, more generally felt than that of any other official would be. Everyone liked him, everyone knew him, and there was no one but had the highest esteem for him. If a patient went out of the hospital friendless and in need Mark Morris was ever ready to help him, not only with money or perhaps clothes, but also by genuine sympathy. If an overworked house physician or house surgeon was in despair owing to there being no vacant bed for an urgent case the invaluable steward was applied to and somehow or other managed to provide a bed. His was a striking personality. He somewhat resembled in manner and gait the late Provost of Eton, Dr. Goodford, as pourtrayed in *Vanity Fair*, and had the same shrewd kindliness of disposition. He was a perfect mine of information as to the history of the hospital, and although an admirable organiser and man of business he was also a fair art critic and an acute judge of old prints, of which he had a good collection. After forty-five years of faithful service he has gone to his rest, and though he will never be forgotten we hope that the governors of the hospital will see their way to establish some tangible memorial of so faithful a servant and so good a friend.

WE have received from the treasurer of Guy's Hospital a copy of a letter from Mr. Gladstone to him urging the claims of the hospital to public support. This eloquent letter has, we are certain, fallen under the notice of most of our readers in the daily press, so that we need not quote its words. If anyone can advance the cause in which it has been written he will be serving the sick and poor in the most efficacious and direct manner.

AS we have intimated, there has been unavoidable delay in the structural alterations of the premises of the General Medical Council, which makes it impossible for the usual November meeting to take place there. It is contemplated to postpone the meeting for some weeks. This is no doubt a serious course; but there are said to be difficulties in the way of holding the meeting in any other place.

THE Lord Bishop of London is, we regret to hear, suffering from a sharp attack of acute tonsillitis. The report, however, as we go to press is that his lordship's condition is much improved, though he is still very weak.

DR. J. B. BRADBURY will deliver the Bradshaw Lecture of the Royal College of Physicians of London, "On some New Vaso-dilators," on Tuesday, Nov. 12th, at 5 P.M.

THE dinner of the Metropolitan Police Surgeons' Association, arranged for Oct. 31st, has been unavoidably postponed.

WE regret to learn of the death of Inspector-General Sir William Mackenzie, K.C.B., C.S.I., M.D., which took place on Tuesday last at the ripe age of eighty-four. Sir William Mackenzie was an honorary physician to the Queen and had seen much service in India under Sir Hugh Rose and Lord Napier of Magdala.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

DEBATE ON THE PETITION FOR ADMISSION OF WOMEN TO THE EXAMINATIONS AND DIPLOMAS.

AN extraordinary Comitia of the Royal College of Physicians of London was held on Thursday, the 24th ult., the President, Sir J. RUSSELL REYNOLDS, Bart., being in the chair.

Communications were read from the Royal College of Surgeons of England reporting the proceedings of the Council on July 29th and Oct. 10th, and asking for the appointment of delegates to confer with delegates of the Royal College of Surgeons of England upon the question of altering the arrangements of the Five Years' Scheme adopted by both Colleges in January, 1892. The delegates of the Royal College of Surgeons of England were Mr. T. Bryant, Sir W. MacCormac, Mr. H. G. Howse, Mr. C. Heath, Mr. R. Harrison, and Mr. T. P. Pick.

The PRESIDENT nominated as the delegates of the Royal College of Physicians of London Dr. Ord, Dr. Norman Moore, Dr. E. Liveing, Dr. Cayley, Dr. Poore, and Dr. F. Taylor.

A petition from the officers and teachers of the London School of Medicine for Women, and of the staff of the Royal Free Hospital and others, praying the College to admit the students of that school to the examinations and diplomas of the College, was read by the Registrar.

Dr. C. WEST, as the senior Fellow present, rose to move that the petition be not granted. He remarked that eighteen years ago the same question was debated in the College, and the admission of women was rejected by 68 votes to 16. The same privilege was sought for now—namely, the admission of women to become members of the College, to take part in its work, and to have the right even of occupying the presidential chair. It was the bounden duty of the College, before granting such a request, to ask the reasons for its being claimed. Quoting from an inaugural address by the founder of the movement for the admission of women to the medical profession, he said that the grounds put forward were those of opening to them a career of serious occupation—one which rendered them independent of marriage for a position, and which saved them from the fear of poverty; and he contrasted such aims with the high and impersonal motives that used to be put before the newly-admitted graduates of the University of Berlin as guiding their career in medicine. He admitted that many fell below these high requirements, but considered that women had duties to fulfil nearer to them than that of following the medical profession; or if they had no home ties there were many other avenues open to them in which to earn a livelihood, such as teaching and nursing, pursuits for which they were far better fitted. But in regard to their claims to follow callings similar to those adopted by men, they were pleading as if they were deprived of their heritage, unmindful of the fact that in all times the highest homage had been rendered to woman. The question of the fitness of women to practise medicine was not in any respect one of their ability to pass examinations. There had always been learned women who were not out of proportion to the number of learned men. But what claim had they to be introduced into the College? What had they done for midwifery, which for a century and a half was entirely in their hands? Even their writers on this subject—as Madame La Chapelle and Madame Boivin—were largely assisted in their works by medical men. They had invented no new procedures, and he would ask what contributions to medicine had proceeded from the female practitioners in America during the fifty years or so of their work there, or from those in England? Had they done anything to raise the standard of medical ethics, and how would medical questions be assisted in debate or otherwise by their partaking in them? Even on the lower ground of expediency there was no need for this change, which was regarded but as a step to their admission to other professions. It was not a mere social change, but a social revolution that was threatened—a "shooting of Niagara." He trusted that all the Fellows would see that it was something more than the dignity of the College that was at stake, it was the whole question of the position of women in the social body, and he expressed the hope that in the interests of women themselves the Fellows would show that they still retained the old spirit of chivalry in spite of the onslaughts made on it by the new woman, and refuse to countenance a movement which might ultimately lead to the revival of the legend of Pope Joan in the occupancy of the presidential chair. He moved: "That the Royal College of Physicians having maturely considered the petition of the officers and teachers of the London School of Medicine for Women, and of the staff of the Royal Free Hospital and others, praying the College to admit the students of that School to the examinations and diplomas of the College, decline to grant the prayer of the petition."

Sir J. FAYRER, in seconding the motion, said that the question was one in which he had never desired to take part, but upon which he felt strongly. He would not follow Dr. West in his arguments of the fitness of women to practise medicine, that not being the question before them, which was one concerning the dignity of the College and the expediency of admitting women to its examinations and diplomas. He did not question their fitness, but he did doubt the propriety of altering the constitution of the College — an ancient corporation of scientific men — for the sake of a dangerous experiment. Such a proposal might indeed be reconsidered after ladies had been admitted to the Senate, Bench, or Bar. Turning to the question of zenana work in India, Sir J. Fayrer said that so far as his experience went there was no difficulty in the way of medical men entering the most jealously guarded harem when there was need for their services, and he thought too much had been made of this argument. There was, indeed, scope for educated women to instruct native women in the principles of prevention of disease, but no need of them as doctors. He said that the many portals whereby women could enter the medical profession proved that there was no necessity for the College to also open its doors, and he failed to see either the expediency or propriety of there being ladies admitted to their meetings; for of course if they were admitted as Licentiates they would qualify to become Members and Fellows.

Sir B. W. RICHARDSON said that he had no desire to encourage women to enter the profession of medicine, but he could not support the proposal to reject this petition to the College. He reminded the Fellows that in the past the College had more than once done injury to itself by refusing to take steps in advance. About ninety years ago it declined to take the lead in establishing a new order of practitioners, so that it was left to the Society of Apothecaries to fill the breach, and for fifty years by itself perform a duty which the College eventually had to take up. So now it was not to the interest of the College that the duty of licensing women for medical practice should be left in the hands of other bodies. He reminded the Fellows that when the College was first founded there had never been a woman at the head of the State, but since then four women had sat on the throne, and it was not consistent to exclude women from medical practice whilst recognising their fitness to govern the country. As to the plea that, were this petition granted, a woman might one day become President of the College, he pointed out that since he became a Fellow thirty-five years ago there had only been five or six Presidents, and therefore it was very improbable that the contingency alluded to would be likely to occur within a period of years, when perchance public opinion may have quite changed, and when possibly women may have failed to maintain their position; and if so, what injury would be done to the College? But if, on the other hand, they rose and became a power, there might not be anything very incongruous in their obtaining the highest offices.

Dr. C. J. HARE felt that it would be a dereliction of duty if he did not express some of his thoughts on the subject. It was true that women could pass examinations as creditably as men; but they had no capacity for creating knowledge or advancing it. They had done nothing in music, although far more of them had studied than had men, who alone filled the ranks of composers. In mathematics there had, it is true, been a Miss Herschell and a Mrs. Somerville, but even these talented women had not extended our knowledge of mathematics. Yet it was asked to admit women into the medical profession, where they were not wanted, and even in India they were not really needed. He reminded

Sir B. Richardson that queens governed through their Ministers. The Royal College of Physicians of London was more than an examining body; it represented ethics and was in direct communication with the Government, and he thought its position would be weakened were this change in its constitution to be brought about. Nor did he agree with the opinion that because women were admitted to the profession they must inevitably be admitted into the College. There are many other careers open to them, easier to gain and easier to follow, and until they were made judges or sat on the bench of bishops the question of their admission to the College might be left aside. Until that time came he trusted the College would not change its constitution—established for 300 years—to meet a transient fancy.

Sir W. BROADBENT (Senior Censor) said that he did not hold office when he signed the petition now under discussion. He did not intend to say much, for he supposed that every Fellow had made up his mind on the subject, which no one would consider lightly. Nor would he follow the eloquent address of Dr. West, although he saw no reason why the lofty ideas of professional responsibility claimed for men should not be equally credited to women. Most of the remarks made, so far, had been addressed to the question of the admission of women to the medical profession, but that question *is* decided, and from the first he had watched the experiment with great interest; nor, in his opinion, had it been a failure. There are to be women doctors, and, that being so, they should have the opportunity of coming under the jurisdiction of the College; it would be better for them and the public that they should be under this jurisdiction. Although Sir J. Fayrer said that in his own experience he had no difficulty in attending native women in India, it could not be said that these women received anything like ordinary medical care. It was an injustice to these women who were devoting their lives to this zenana work to deny them the recognition of the College. They desired a higher status, and it was distinctly discouraging to them not to be able to take the College diploma. He recognised none of the evils alleged to follow the admission of women to the medical profession, and said it was not very respectful to the intelligence of the College to advance as a reason for denying their petition that a woman might one day come to be President of the College.

Dr. BARNES had come to the conclusion that the medical education of women must be imperfect, it could not fairly embrace all the diseases of men, and an imperfectly trained practitioner should not be licensed. He emphatically asserted as the outcome of long observation and experience that the admission of women was a degradation of the profession of medicine.

Dr. DOUGLAS POWELL, referring to a document which had been circulated, and had been signed by very distinguished Fellows, said that it contained some very cogent reasons against the proposal to admit women to the College. The question was one which had to be considered: (1) as it affects the Licentiates of the College; (2) as it affects the community at large; and (3) as it affects the constitution of the College itself. On the first point he remarked that there was nothing for women to do in the medical profession which could not be done as well or better by men; and if the over-stocked profession were to be diluted by the addition of women it could not fail to cheapen and degrade (he did not mean in a bad sense) the lower ranks of the profession. As regards the community the College was regarded by the State as the referee in all great questions of public health and the like, and its opinion on the question of the practice of medicine by women was of importance. For if they could enter this profession they were just as fitted to enter any other. This question had not been hitherto brought before an exclusively medical body. In the University of London it was decided against the opinion of the majority of medical graduates by the votes of graduates of other faculties. But now it came before a purely medical authority, which would assume grave responsibility if it lightly dealt with it. For it was a public question. The appropriate duties of womanhood in the home, and in the rearing and training of children, were incompatible with the practice of any profession, which would exhaust her physical and mental energies and divert them from their rightful objects.

Dr. PAYNE, recalling the discussion in the College eighteen years ago, and the eloquent speech then made by Dr. C. West, fancied that some of the arguments used this day had been uttered then, although the state of affairs had much changed. One thing had not changed, and could not be changed—that was the increasing effort of women to earn a living, a fact not due to caprice, but to economical laws. The simple fact is that there is such a large preponderance of women in this country—about a million in excess of men. The women of the lower classes had to earn their whole living, and the same stress was spreading upwards, so that more and more women had to labour. The old avenues were blocked. They could not all be nurses or governesses, and the economical law was forcing them to seek new careers. They did not have to consider whether medicine was a suitable career for women, or whether it was desirable to prevent them or discourage them. Arguments for their total suppression were slightly out of date, and the right principle was that they should be given a fair field. As to women failing to advance science, it is not asked of candidates for the licence whether they are prepared to add to scientific knowledge, but only if they have a competent ability for a certain task. The history of the College had, as Sir B. W. Richardson pointed out, been sometimes marked by a tendency to declare, *Non possumus*. This happened not very long ago when the College refused to coöperate with the Society of Apothecaries in examinations, with the result that the Society remained as a separate diploma-granting body. At one time only graduates of Oxford or Cambridge were admitted to the Fellowship. The Fellows should consider whether it was wise to adopt a purely negative policy on the question before them. Since it was last discussed the experiment of medical education of women had been tried. He had himself examined a large number of women candidates at the University of London, and could say they were of high average. Nor was there any practical difficulty in conducting the examination. He asked whether it was wiser of the College to raise a protest against the movement and refuse to get the right of exercising any control over female practitioners rather than say that they shall be submitted to the same control as the College exercises over its male licentiates.

Sir R. QUAIN did not see why the surplus population should seek to enter the College. Surely the Bar and the Church were more fitted for them. He fully concurred with what Dr. West, Sir J. Fayrer, Dr. Hare, and Dr. Powell had said, and he felt sure that the opinion of the College on the whole question would have great weight. He contended that in the interests of women themselves and of the public and the profession they should be discouraged from following medicine.

The PRESIDENT said that he had received a letter from Sir W. Jenner, in which he expressed the hope that none of these changes would take place, for he considered that women were unfit to enter the profession by their mental, moral, and physical conditions. His own opinion was much the same. He, too, did not think that women are physically, mentally, and morally fitted to become good medical practitioners. They may be able to pass examinations, to do many clever things, but they have not the knowledge of the world or powers to follow a profession of this exacting kind; nor was it good for the world that they should strive to follow it. He did not look at the question solely as regarded the College. His own judgment was against their entering the profession of medicine; it was the profession which of all they were the least qualified to follow. From a conversation he had lately with a gentleman who knew India well he could confirm what Sir J. Fayrer had said, that the physicians there had free access to all who were in need of their services.

A division was then taken, and there voted: *for* Dr. West's motion, 59; *against*, 50. The petition was thus rejected by a majority of nine votes.

The Comitia then adjourned.

The following is the petition of the students of the London School of Medicine for Women which gave rise to the preceding debate:—

TO THE REGISTRAR OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

"SIR,—We, the undersigned, desire respectfully to petition the Royal College of Physicians of London to admit to its examinations and diplomas students of the London School of Medicine for Women.

"A similar request was made many years ago to the Royal College of Surgeons, England, and refused; but we venture to hope for a different result upon the present occasion, when both Colleges will be approached. That request was made at a time when the admission of women to the medical profession was a question still *sub judice*. Doubts were then felt as to the effects which such a change would have upon the profession and upon women themselves. Years have since passed;

the main question has solved itself, and doubtful points have been settled by experience.

"At the beginning of the present year there were over 200 women upon the Medical Register, of whom more than 150 had been educated at the London School of Medicine for Women. One after another, universities and examining boards have admitted women to their degrees and diplomas, so that few now remain closed. In the charters of recently established universities the right of women to a degree is recognised. Several medical schools for women have been opened in Scotland and Ireland, and the total number of women studying medicine has steadily increased. Many women, both in this country and abroad, hold appointments on the staff of hospitals for women and children; some of these hospitals are worked entirely by women, and cases of all kinds and of all degrees of severity are received. Public bodies, like the General Post Office, the Metropolitan Asylums Board, and various county councils, have appointed women as assistant medical officers in the institutions under their control.

"The British Medical Association, the Medico-Psychological Association, the Society of Anæsthetists, and the Anatomical Society of Great Britain admit women as members. In short, the reception of women into the profession is going on steadily; and experience has proved that those evils have not resulted which it was feared might follow the admission of women to the study and practice of medicine, and that there is a demand for women as medical practitioners.

"The London School of Medicine for Women now numbers on its books 150 students. The results of its teaching, as shown by the position taken by its students in public examinations, are excellent. The biological, chemical, and physiological laboratories are adequate, though the Council desire to improve them, and are raising a fund for rebuilding the school. The Royal Free Hospital, to which students of the London School of Medicine for Woman alone are admitted, provides ample clinical opportunities, and the teaching of the staff is organised upon the usual lines.

"We, therefore, submit that the London School of Medicine for Women, with the Royal Free Hospital, is worthy of recognition by the Royal College of Physicians of London. The withholding of this recognition is a source of serious inconvenience and loss to the school and to its students. If desirous of taking a diploma from a college of physicians or surgeons the students are compelled to travel to Ireland or Scotland, and thus incur unnecessary expense and fatigue in connexion with their examinations.

"On the above grounds we earnestly hope that the Royal College of Physicians of London will accede to our petition, and will open its examinations to the students of the London School of Medicine for Women. We are, Sir, your obedient servants,

"ELIZABETH GARRETT ANDERSON, M.D., Dean and Lecturer on Medicine.
JULIA COCK, M.D., Subdean.
A. T. NORTON, F.R.C.S., Treasurer and Lecturer on Surgery.
ISABEL THORNE, Honorary Secretary.
Sir GAINSFORD BRUCE, Chairman of the Committee of the Royal Free Hospital.
CHARLES BURT, Chairman of the Weekly Board, Royal Free Hospital.
JOHN COCKLE, M.D., F.R.C.P., F.R.C.S., Consulting Physician.

"Royal Free Hospital Staff.

"*WILLIAM ROSE, M.B., B.S., F.R.C.S.
*FREDERICK J. GANT, F.R.C.S.
A. BOYCE BARROW, M.B., F.R.C.S.
JAMES BERRY, M.B., B.S., F.R.C.S.
J. GROSVENOR MACKINLAY, F.R.C.S.
WILLIAM H. BATTLE, F.R.C.S.
H. WORK DODD, F.R.C.S.
E. W. ROUGHTON, M.D., B.S., F.R.C.S.

"WILLMOTT EVANS, M.D., B.S., F.R.C.S.
SAMUEL WEST, M.D., F.R.C.P.
HARRINGTON SAINSBURY, M.D., F.R.C.P.
THOMAS C. HAYES, M.D., F.R.C.P.
JAMES CALVERT, M.D., F.R.C.P.
F. W. ANDREWES, M.B., F.R.C.P.
J. WALTER CARR, M.B., B.S., F.R.C.S.
LOUISA B. ALDRICH BLAKE, M.D., B.S.

* Consulting Surgeons.

"Lecturers at the London School of Medicine for Women.

"STANLEY BOYD, M.B., B.S., F.R.C.S., Lecturer on Anatomy.
H. B. DONKIN, M.D., F.R.C.P., Lecturer on Medicine.
MARY L. DOWSON, L.R.C.P.I., L.R.C.S.I., Lecturer on Forensic Medicine.
A. DUPRÉ, F.R.S., F.C.S., Lecturer on Toxicology.
W. D. HALLIBURTON, M.D., F.R.C.P., F.R.S., Lecturer on Physiology.
CHARLES MERCIER, F.R.C.S., Lecturer on Mental Pathology.
MARY A. D. SCHARLIEB, M.D., B.S., Lecturer on Midwifery and Gynæcology.
A. QUARRY SILCOCK, M.D., B.S., F.R.C.S., Lecturer on Pathology.

"Sir WILLIAM H. BROADBENT, Bart., M.D., F.R.C.P.
Sir JAMES PAGET, Bart., F.R.C.S.
Sir HENRY ACLAND, Bart., K.C.B., M.D., F.R.C.P., F.R.S.
Sir THOMAS CRAWFORD (the late), K.C.B., M.D., F.R.C.P.I., F.R.C.S.I.
Sir ALFRED GARROD, M.D., F.R.C.P., F.R.S.
Sir HENRY THOMPSON, F.R.C.S.
Sir WILLIAM ROBERTS, M.D., F.R.C.P., F.R.S.
Sir SPENCER WELLS, Bart., M.D., F.R.C.S.
SAMUEL WILKS, M.D., F.R.C.P., F.R.S.
J. HUGHLINGS JACKSON, M.D., F.R.C.P., F.R.S.
THOMAS BUZZARD, M.D., F.R.C.P.
H. CHARLTON BASTIAN, M.D., F.R.C.P., F.R.S.
THOMAS BARLOW, M.D., F.R.C.P.
W. ORANGE, C.B., M.D., F.R.C.P.
T. LAUDER BRUNTON, M.D., D.Sc., F.R.C.P., F.R.S.

"THOMAS BOND, M.B., B.S., F.R.C.P.
CHARLES J. CULLINGWORTH, M.D., F.R.C.P.
W. R. GOWERS, M.D., F.R.C.P., F.R.S.
VICTOR HORSLEY, F.R.C.S., F.R.S.
STEPHEN MACKENZIE, M.D., F.R.C.P.
FREDERICK TREVES, F.R.C.S.
J. KNOWSLEY THORNTON, M.D., C.M.
E. A. SCHÄFER, F.R.S.
AUGUSTUS WALLER, M.D., F.R.S.
I. BURNEY YEO, M.D., F.R.C.P.
RICHARD BARWELL, F.R.C.S.
HERBERT W. PAGE, M.B., F.R.C.S.
JOHN H. GALTON, M.D.
FREDERICK T. ROBERTS, M.D., F.R.C.P., M.R.C.S.
JONATHAN HUTCHINSON, M.D., F.R.C.S., F.R.S.
E. RAY LANKESTER, M.A., LL.D., F.R.S."

The following is the text of a statement circulated among the Fellows of the College prior to the meeting on Oct. 24th:—

"We the undersigned Fellows of the Royal College of Physicians of London, gravely impressed with the far-reaching importance of the question, now before the College, whether to admit women to its diplomas, desire to place on record our reasons against granting the prayer of the petition recently presented by the officers and teachers of the London School of Medicine for Women.

"In common with a large body of medical men—probably a great majority—we hold, and always have held, that the admission of women to the medical profession is most undesirable; and, whilst fully admitting the ability of women to comply with mere examinational tests, we are none the less convinced that they are by nature unfitted for the pursuit and practice of the medical profession.

"Although some holding this view have nevertheless deemed it both consistent and desirable not to oppose the admission of women, but have, on the contrary, given substantial aid to the attainment of that object, yet we see no reason to depart from our original carefully grounded objections, and, while recognising with regret the action of other bodies, desire to offer all legitimate opposition to the same course being followed by the Royal College of Physicians.

"We are unable to admit the force of the arguments urged in favour of the admission of women to the diplomas of the College, on the ground that other corporations and Universities have admitted them, and we fail to recognise any injustice in the refusal. The number of Universities and Medical Corporations of the United Kingdom which now admit women to their degrees or diplomas is sufficient to secure a full and complete trial of what at present is but an experiment—an experiment which another generation may show to be a mistake. In the metropolis itself the London University and the Apothecaries' Society open their doors to women, and thus offer ample opportunities for qualification.

"To the argument that the admission of women to the College is 'inevitable,' we desire to offer the fullest resistance; believing that the principle is wrong, we refuse to submit to considerations of expediency, and regard it as a duty which we owe to the College, to the Profession, and to the Public at large to prevent, to the utmost of our ability, the Royal College of Physicians being made a portal to the obtaining that which our reason and judgment condemn.

"On two points we have reason to believe considerable misconception exists. Inasmuch as the licence of the College gives a title to proceed to the membership, and that the Members are potential Fellows, it would be difficult if women were admitted to the lowest to exclude them from the higher diplomas. Those who support their admission must be prepared to admit them to the counsels and administration of the College, and to place the highest offices in the College within their reach.

"It is also urged that, in view of the possibility of the Royal College becoming associated for examinational purposes with a reconstituted London University, such a circumstance would of necessity compel the College to admit to its diplomas all candidates, irrespective of sex, in whose examination the College took a share. But this is not so. In all discussions in the College on the University question, the full power of the College to confer or withhold its diplomas by the vote of the Fellows, as at present (independently of the results of examination), has been fully reserved.

"On the ground, therefore, of our objection on principle to the admission of women to the profession, and having regard to the extensive opportunities they already possess for obtaining a registrable qualification, we protest against this College, the most ancient and influential medical corporation in the kingdom, being forced into a position from which there would be no receding and which could only be occupied with loss of dignity and prestige in order to satisfy what we believe to be the improper demand of an inconsiderable minority.

"CHARLES WEST.
RICHARD QUAIN.
WILLIAM JENNER.
JOHN W. OGLE.
CHARLES J. HARE.
F. W. PAVY.
W. H. DICKINSON.
SAMUEL GEE.
J. FAYRER.
HENRY GERVIS.
J. MITCHELL BRUCE.
W. H. ALLCHIN.
DONALD W. C. HOOD.
PATRICK MANSON.

"Oct. 22nd, 1895.

"*** The foregoing statement has only been prepared within the last few days, and no extended attempt has been made to obtain signatures. The College officers have not been asked to sign."

From the signatures attached to the petition and to the above circular it will be seen that a large number of Fellows of the College had publicly stated their views before the meeting. We have only to add that we consider it both a sign of the times and a manifestation of wisdom that the proceedings at the College on this occasion were not declared *secreta Collegii*.

THE YARROW CONVALESCENT HOME.

ON Saturday last, on the invitation of the beneficent founder, a very large party of medical men and others were conveyed by special train to Broadstairs, where every facility awaited them for seeing this Home (to the establishment of which we have already referred), with all its provisions for the comfort and the health of the young invalids and convalescents in the ranks of the respectable but straitened classes for whose benefit it has been erected. The day, though fine, was cold, but so admirably warmed was every corridor and room that everybody felt comfortable. The accommodation is for fifty girls and fifty boys under the age of fourteen, though there is power left to the committee,

in special circumstances, to admit those a year or two older. The five shillings a week that have to be paid are just enough to facilitate the selection of a class above the very poor, who are pretty well provided for in other homes. The building is of red brick and does credit to the architects and builders, respectively Messrs. Davis and Emanuel, Finsbury-circus, and Messrs. Colls and Sons, London. Every room is cheerful in its light and abundantly supplied with fresh air, which is warmed on its way into the house. This feature of warmth is very important and renders it possible to keep many cases in winter on a healthy coast which might otherwise be too cold. The walls of all the rooms are adorned with really pretty pictures, which are understood to be the gift of a friend of Mr. Yarrow. The Home stands in fine grounds covering an area of ten and a half acres, and has a fine sea frontage. The cost of the building and the endowment of it are the exclusive work of Mr. Yarrow, who admits no one to share in the pleasure, which he must feel to be great, of providing a convalescent home for classes that have been much overlooked by philanthropists. We have often thought, and even said, that this is the true way to found and endow hospitals in a wealthy country. It was thus that Guy's Hospital took its rise. It is an example to be followed.

Of two hundred guests that were present the great majority were members of the profession. Among them were Sir William Broadbent, Sir William Roberts, Sir J. Crichton Browne, the President of the Royal College of Surgeons of England (Mr. Heath), Mr. Hutchinson, Mr. Holmes, Mr. Langton, Mr. C. B. Keetley, Mr. Treves, Mr. Arbuthnot Lane, Mr. Reginald Harrison, Mr. Swinford Edwards, Dr. C. J. Hare, Dr. J. Harley, Dr. Stephen Mackenzie, Dr. J. B. Ball, Dr. Glover, Dr. Sainsbury, Dr. R. Dudfield, Mr. L. Bidwell, Mr. D'Arcy Power, Mr. Jackson Clarke, Dr. Stowers, Mr. Percy Dunn, Dr. Henderson, Mr. Charles King, Dr. Abercrombie, Mr. M. Morris, Dr. Alderson, Dr. Clemow, Mr. R. Lloyd, Mr. L. Mark, Mr. Jocelyn Swan, Dr. H. P. Henry, Dr. Clippingdale, Mr. H. Menzies, Dr. Eddowes, Dr. Yarrow, Dr. Lough, Mr. Lewis Lewis, Dr. Kisch, Dr. S. Smith, Mr. Mallam, Dr. Warham, Dr. Senior, Dr. Dodsworth, Mr. E. R. Spencer, and others.

Sir William Broadbent well represented the visitors, publicly thanking the founder for the Home as one likely to meet a great want. Mr. Yarrow's only anxiety is to be well advised of suitable cases, and for this he looks mainly to the medical profession. After the meeting on Saturday he is not likely to look in vain, and we heartily wish for the institution under the management of Miss Power a long career of usefulness.

REPORT OF THE MEDICAL OFFICER TO THE LOCAL GOVERNMENT BOARD, 1893-94.

[SECOND NOTICE.[1]]

CONTINUING our analysis of the contents of this publication, we have to notice a report by Dr. Wheaton on an outbreak of diphtheria in the Hinckley urban and rura sanitary districts. The precise extent of this outbreak, which occurred from September to November, 1893, is not accurately known, as notification is not in operation in the district. However, the fact that within eleven weeks there occurred no fewer than twenty-eight deaths from this disease, as compared with but one such death in the preceding eight months, points to an epidemic of considerable proportions, probably between two and three hundred attacks. The inquiry was conducted carefully and systematically, with the result that neither the water-supply, milk-supply, nor general sanitary conditions could be implicated as the cause of the outbreak. The cases were fairly equally distributed, and no connexion could be traced between their incidence and local drainage or other defects; indeed, the majority of cases occurred in houses where the drains were in good condition. On the other hand Dr. Wheaton believes that the susceptibility to infection and the severity of attacks are probably influenced by exposure to the effluvia from privy middens and the impregnation of the surrounding soil. The precise origin of the outbreak is a matter of doubt. There had been a large fair in the town at the end of August, whilst ever since the previous year "septic" throats had prevailed in association with measles or scarlet fever. But if the origin of the outbreak was mysterious there can be no doubt as to the influence of schools in spreading the disease. The outbreak coincided with the reopening of the schools, and the families attacked were almost exclusively those whose children attended the public elementary schools. The incidence of the disease was mainly on children under fourteen years of age, and in nearly every one of these the first to be attacked was attending one or other of the schools. When to this is added the lack of sufficient sanitary precautions, of disinfection and the like, the spread through the school attendance of children from infected houses accounts for a great deal of the epidemic. Dr. Wheaton found that sore-throats were exceedingly common among the school children, and he himself met with several cases among the children of the town generally, including those who were below school age. The relationship of these forms of sore-throat to diphtheria is discussed, and the inference to be drawn is that this must be very close. It is remarkable that these throat affections undoubtedly prevailed most in insanitary houses with defective drains, ill-constructed middens, and the like. The bacteriology of these forms of sore-throat is a subject which is worthy of elucidation, and its study may throw some light on their alliance with diphtheria.

The remarkable outbreaks of a form of Epidemic Skin Disease amongst the inmates of certain metropolitan workhouse infirmaries, to which attention was first directed in 1891 by Dr. Savill at Paddington and Marylebone infirmaries, forms the subject of a lengthy report by Dr. Monckton Copeman. His inquiry related to the outbreaks in 1893 and 1894 at the infirmaries of Bethnal Green, Bow, Shoreditch, St. Marylebone, and St. George's-in-the-East. The clinical and pathological characters of the affection are lucidly described, their resemblance to pityriasis rubra and acute general eczema pointed out, and the fact that this was associated with marked febrile disturbance, the eruption being followed by great desquamation and not infrequent relapse. The fatality was from 5 to 12 per cent. of the attacks, the fatal cases being generally in the aged, and in some preceded by albuminuria and uræmia. It can hardly be said that the etiology of this peculiar affection has been fully cleared up. The subjects were all fairly advanced in years and of both sexes, and being infirmary subjects were mostly suffering from chronic ailments. The disease could not be attributed to any ordinary sanitary defects, although it is stated—as may naturally be expected—that lack of ventilation seemed to be responsible for its spread and for the severity of attack. In one instance it seemed as if the milk-supply had to do with the outbreak, but in another infirmary there was no reason to suspect that this article of diet had any such relationship with the disease. Nevertheless, in the former instance there was so marked a coincidence between the first occurrence of the affection and a change in the supply of milk, and a similar coincidence between other outbreaks and the milk-supply from the same contractor, that it is difficult to altogether set aside the hypothesis. Dr. Copeman and Dr. F. W. Andrewes made bacteriological investigations into the disease, but they failed to detect any specific organism other than a staphylococcus identical with one that is known to occur in healthy skin. The report is furnished with several portraits and with clinical charts.

The important subject of Lead Poisoning from the consumption of Water derived from certain Moorlands has been for several years under consideration. In 1885 Dr. Sinclair White, then medical officer of health of Sheffield, had reported that the implicated waters had an acid reaction, and in a communication to the Local Government Board upon this report Mr. W. H. Power had suggested that the special quality of such water which rendered it capable of dissolving lead might possibly be due to the agency of a microphyte. It was then decided to make an exhaustive inquiry into the prevalence of lead poisoning amongst the consumers of moorland waters and to determine more precisely the conditions under which the water acquires this property. An interim report on the inquiry is here published from Mr. Power's pen. The investigation began in 1890 and is not yet completed. It was determined to study these waters on their gathering grounds, and for this purpose the laboratory work was carried on at Settle, first by Mr. and Mrs. Atkinson of Settle, under the supervision of Dr. Barry, and later by Dr. Houston. An extensive preliminary inquiry had shown that, whereas in the West Riding lead poisoning

[1] The First Notice was published in THE LANCET of Sept. 28th, 1895.

attributed to moorland water was widely recognised, it was hardly known in districts of Lancashire, and not at all in Cumberland and Westmorland. The report (page 335) says: "How far this contrast in the amount of observed lead poisoning in the several counties was to be thought of as referable to intrinsic differences in moorland water as such, to precautionary measures, private or public, that had been taken, or to want of recognition of lead poisoning that was tending to occur could not be judged of from the data supplied, so that it was seen that in these aspects the subject would require further study, which has accordingly been undertaken."

The Settle investigations had, prior to Dr. Houston assuming their direction, established the fact that not only was the solubility of lead associated with acidity of the water, but that no other condition was implicated, the research being carried on with a particular water, of which samples were gathered and examined regularly week by week for a long period (the specimens of water were taken from Burnmoor from November, 1891, to April, 1893). The continuous labour involved in these investigations must have been considerable; their result is concisely summarised by Mr. Power as follows (page 338): "As the outcome, therefore, of exact study of the natural history of different classes of waters from the given gathering ground, one class alone of such waters—that obtained from certain pools in the peat—was found to possess in marked degree, and persistently, ability to dissolve lead. And, further, among a plurality of conditions, physical and chemical, appertaining to this particular class of water, one alone was found distinctly and uniformly parallel to its property of readily dissolving lead—namely, acidity of nearly every sample."

To Dr. Houston has been assigned the task of extending these observations in the direction of determining the differences in action on lead exercised by water, and the correlation of acidity and lead-dissolving property in regard of moorland waters. More important still has been the attempt to determine the cause of the acidity of moorland water. This work is still in progress, but it suffices here to state that he has succeeded in finding an intimate connexion between the development of acidity and the presence of certain bacterial organisms derived from peat, the morphological and biological characters of which are described in an appendix to the report. Thus it will be seen that there is every probability that Mr. Power's sagacious inference from his study of the facts of the Sheffield observations in 1885 is likely to be verified, and a way found of depriving moorland water of this obnoxious quality.

A report on Cholera in Germany during the winter of 1892-93, by Dr. F. W. Barry, and a memorandum on the sanitary survey of the ports and riparian sanitary districts made by the officers of the Board during 1893, as well as the various memoranda issued on the subject of cholera by the medical officer, keep this important question fully under notice. Dr. Thorne Thorne also makes a report with his colleagues of the British delegation upon the International Sanitary Conference of Dresden.

The space devoted to the record of scientific investigations undertaken for the department during the year is not so large as usual, but the interest of the reports contained in this part is in no way inferior. Dr. Klein, continuing his studies on the Etiology of Typhoid Fever, shows that the differentiation between the typhoid fever bacillus and the bacillus coli (considered to be identical by some French authorities) obtains outside the animal body in water. He proposes to further study the behaviour of these two organisms in waters of various characters and under various conditions. In his examination of the water furnished by the supplies at Worthing and at Rotherham during the epidemics in those places he found true bacillus coli, as well as a bacillus closely resembling it, and in a few colonies a bacillus presenting the characters of the typhoid fever organism. Dr. Klein also carried out a series of experiments upon monkeys, both by feeding and inoculation, with the typhoid fever bacillus without obtaining any evidence of the lesions of that disease in the animals, except that in the latter group (inoculations) some presented splenic enlargement and one had also enlargement of lymphatic glands. Nor were the results of bacteriological examination more conclusive, and, as Dr. Thorne Thorne says, they were too indefinite for Dr. Klein's purpose. He next proceeded to inoculate calves subcutaneously with cultures of the typhoid fever bacillus; no febrile disturbance followed, but the lymphatic glands of the inoculated region were swollen and yielded the typhoid fever bacillus "in abundance." It remains to be seen whether this organism can multiply in the tissues of the milch cow, and, if so, "if it is at any time capable of passing out of the animal's body by way of the milk gland or milk," and this Dr. Klein proposes to investigate. The same observer contributes a further Report of his researches on the Antagonisms of Microbes, in which he shows that no poisonous action is exerted by intra-peritoneal injections in guinea-pigs of large doses of the intra-cellular substance of bacillus anthracis, of bacillus diphtheriæ, and of bacillus of fowl cholera respectively, which therein differ from Koch's cholera vibrio, Finkler's vibrio, the bacillus coli, the typhoid fever bacillus, the bacillus prodigiosus, and the proteus vulgaris. Nor does such injection (in the case of the three first-named) "confer any immunity whatever against, or any tolerance of, a further injection with the living microbes." The bacillus of grouse disease, however, resembles the second group in the protection conferred by injection of its intra-cellular substance into the guinea-pig. Dr. Klein also reports on Psorosperms in their Relation to the Etiology of Cancer in a paper largely critical of the work done by other observers on this subject, concluding that the intra-cellular bodies alleged to be parasitic in nature are to be explained by nuclear and other changes. He excludes, however, from this category the amœba-like bodies discovered by Kerotneff and named by him "rhophalocephalus carcinomatosus," but even these are sparse in distribution and may have no etiological relationship with the cell proliferation of carcinoma. Some further research on the Etiology of Vaccinia is also reported by Dr. Klein. It consists mainly in the record of failure to cultivate vaccine lymph either directly on culture media or indirectly by using the tissue of glands enlarged after inoculation of the guinea-pig or calf with vaccine lymph.

Dr. Sidney Martin gives a preliminary report of his investigations upon the Chemical Pathology of Tetanus, his general conclusions as so far obtained being: "(1) That in all cases of traumatic tetanus there are present, in the spleen and in the blood, the products of bacterial action—viz., albumoses, and certain acid organic bodies; (2) that to the albumoses must be ascribed the production of the fever of tetanus—they produce no tetanic convulsions; and (3) that the other extract contains the substances which are the direct excitants of the muscular spasms in tetanus."

The volume concludes with a paper by Dr. Cautley on the Bacteriology of Catarrh, the nasal secretions being examined in ten cases, which, although yielding several microbes, did not contain any to which specific characters could be attributed; and also papers by the same observer on the Micro-organisms found in the Bronchial and in the Mesenteric Glands.

THE CASE OF MR. R. B. ANDERSON.

FROM time to time we have recorded the various stages reached in this case, and quite recently [1] we gave a *résumé* of the whole case. It will be remembered that the jury who tried Mr. Anderson's case in England returned a verdict in his favour, but the presiding judge entered judgment for the defendant on the ground that no action would lie against a judge in his judicial capacity. This judgment was upheld on appeal. Mr. Anderson gave notice to set aside this judgment, but the Court ordered it to be struck out of the list. He then served a notice of motion to have the original motion restored, and on Thursday, Oct. 24th, personally applied to the Court for leave to have this motion heard, and that the judgment should be set aside as void or voidable on the ground that, since the judgment had been given, he had discovered certain new facts which, he alleged, disqualified Lord Esher, one of the judges constituting the Court of Appeal, from taking part in the judgment. As Lord Esher was sitting on the bench now, Mr. Anderson applied that the Court should be properly constituted, stating that he had authorities to show that the Court had power to set aside its own judgments, and explaining that, as an action was pending against Lord Esher at the time an appeal was made, the Court which heard the case was not properly constituted and the judgment not a judgment at all. The Court, however, dismissed the application.

Mr. Anderson, we understand, will now take the case to

[1] THE LANCET, Aug. 31st, 1895.

the House of Lords, providing he is not deterred by the consequent expenses. But, surely, Englishmen, who in times past have fought some noble battles for their rights in cases almost as hopeless as this appears to be, will not withhold the sinews of war for a cause which concerns themselves as much as it does Mr. Anderson. The justness of his cause has been recognised by law, but because his oppressor is one who had the right to administer the law Mr. Anderson is compelled to go without redress.

The Civil Rights Defence Committee, whose address is 5, Mitre-court, Temple, have charge of the case, and we wish them God-speed in their efforts.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Wolverhampton Urban Sanitary District.—The county borough of Wolverhampton, one of the thirty-three great towns, had during 1894 a corrected death-rate of 21·66 per 1000, as against an average for the thirty-three towns of 19·59. Its zymotic death-rate (3·23 per 1000) was, too, above the large towns average, which was 2·24. In the matter of scarlet fever mortality Wolverhampton takes first place with a rate of 0·63 per 1000, against an average of 0·21. The social conditions appertaining to the east sub-district of the borough are, Dr. Henry Malet considers, very largely responsible for the high death-rate of Wolverhampton. As an instance of the protective value of vaccination to persons exposed to small-pox Dr. Malet gives the following table showing the number of vaccinated, unvaccinated, and re-vaccinated exposed in infected houses and the protection afforded in each case:—

	Persons.	Cases of small pox.	Deaths.	Very severe.	Severe.	Mild.	Very mild.
Vaccinated	241	54	3	2	4	6	39
Unvaccinated	21	8	2	3	3	—	—
Revaccinated	10	—	—	—	—	—	—

To the ten revaccinated persons referred to in the table may be added thirteen members of the staff, all of whom remained exempt from attack. In dealing with the question of scarlet fever Dr. Malet alludes to the much higher fatality-rate which characterised the cases occurring in the east sub-district as compared with those in the west, the difference being equally marked both in home treated and hospital treated cases. A certain number of enteric fever cases which occurred in Wolverhampton during 1894 may possibly have been due to the consumption of infected watercress; while a small outburst of scarlet fever was brought home to milk infected with that disease. Dr. Malet makes some interesting observations on "return" cases of scarlet fever, a subject which we notice is to be discussed at the Epidemiological Society on Nov. 15th by Mr. T. W. Thompson, the author of that admirable monograph on the Natural History of Infectious Diseases contained in vol. ii. of Stevenson and Murphy's "Treatise on Hygiene and Public Health."

Dumbarton County Sanitary District.—In his annual report for 1894 Dr. J. C. McVail sets before his sanitary authority the general principles which should be held in view with regard to the formation of special scavenging and cleansing districts according to the provisions of the Local Government (Scotland) Act, 1894. From the scavenging facilities afforded by the Act Dr. McVail anticipates very great benefit, and he points to the danger which must necessarily accrue from the present air pollution caused by "heaps of decomposing filth collected behind almost every house." Dr. McVail records some interesting outbreaks of infectious disease in his report. In one instance a local outbreak of enteric fever may have had its origin either in a polluted water-supply or in manure from Glasgow. Under either circumstances there would appear to be need of reform; the water should be protected from risks of pollution, and the manure traffic should be so carried on as to diminish the nuisance as much as possible; covered sheds should be used for unloading, as Dr. McVail advises, and covered carts and waggons for transport. A peculiar outbreak of diarrhœa occurred at Woodilee Asylum during 1894. The first few cases were all in one ward, and several cases occurred in adjoining beds. There were three deaths. Drainage, food, milk, and apparently water were excluded as causes of the outbreak. On the whole, Dr. McVail was inclined to regard this disease as an irritative diarrhœa capable of conveyance atmospherically from bed to bed or by nursing, cooking utensils, or night-stools. Once developed, it manifested an ability to attack able-bodied individuals, such as nurses and others exposed to contagion; in fact, the outbreak seems to have borne some resemblance to that which occurred at Greenwich Workhouse in 1893. Into the question of rivers pollution Dr. McVail does not enter in his annual report, as the subject is to be dealt with in special reports, one of which, that relating to the Gareloch, is noticed below.

Bolton Urban Sanitary District.—The estimated population of Bolton for 1894 was 118,303, and the number of persons to an acre 50·2. The fall which has taken place in the general death-rate of this district since 1851 is one which should encourage the sanitary authority. For the four decades comprised within the years 1851 to 1890 the average rates per 1000 were respectively 30·7, 27·5, 23·8, and 21·8; per 1000 for the four years 1891–94 the average rate was 21·7, and for the year 1894 18·7.

ESTUARY POLLUTION IN DUMBARTONSHIRE.

In his annual report for 1894 Dr. J. C. McVail, the medical officer of health for the county of Dumbarton, omitted any detailed reference to rivers pollution in his district owing to the fact that the subject was about to be dealt with in special reports. The first of these reports, that referring to the pollution of the Gareloch, has just reached us, and it is certainly an extremely interesting document. The Gareloch is a branch of the Clyde estuary, and as such the Rivers Pollution (Prevention) Act does not apply to it without an Order from the Secretary for Scotland. The waters of this arm of the Clyde are much polluted by human excrement, and with a view to the discontinuance of such pollution an endeavour is being made by the Dumbarton County Council to bring the Gareloch under the operations of the Rivers Pollution (Prevention) Act. As a means to this end an elaborate report has been made to the Rivers Pollution Committee of the Council by Mr. Francis Buchanan, convener of the Public Health Committee, and Dr. McVail. The inquiry relates solely to the pollution of the Gareloch, and it has been deemed advisable to confine the inquiry to the drainage of the dwelling-houses on the shore of the loch and pollutions of the vessels anchored in, or plying on, its waters. The effects of the pollutions of the Clyde upon the condition of the Gareloch have not been dealt with. In order to establish the degree and effect of the pollutions experiments were made in regard to the currents in the loch and to the amount of suspended fæcal matter present. The observations with respect to the currents were made with heavy wooden floats sunk well into the water by means of a leaden keel, and kept in view by means of a flag; it was found that cork floats were too much influenced by the wind to give a correct idea of the currents. The results of the float experiments were very interesting, as they showed that excreta from ships in the loch tend to be carried up and down its waters rather than to pass out into the Clyde. The observations with regard to the matter in suspension were made with tow-nets consisting of bags constructed of fine but strong muslin which were towed behind a steam launch. By this means much fæcal matter was collected, and it was demonstrated that one of the chief causes of pollution in the outer basin was due to the *Empress* training ship, with some 400 persons on board, which was anchored in this locality. These interesting observations were made by Mr. Pearcy of Owens College, Manchester, who had experience of this sort in the *Challenger* expedition, and the same gentleman also makes in the report some very interesting observations on the influence of pollutions upon marine life. That there is considerable pollution of the Gareloch has certainly been demonstrated, and the question now is as to whether the Secretary for Scotland will consider the facts adduced sufficient to justify him in

bringing the Gareloch under the provisions of the Rivers Pollution Act, or sanctioning by-laws under Section 57 of the Local Government Act, 1889. The question is one of very considerable public importance, as doubtless other sanitary authorities, both in Scotland and England, cannot fail to be guided in some degree in their future action by the decision of the Secretary for Scotland.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6111 births and 4011 deaths were registered during the week ending Oct. 26th. The annual rate of mortality in these towns, which had been 21·0 and 19·1 per 1000 in the two preceding weeks, rose again to 19·7 last week. In London the rate was 17·5 per 1000, while it averaged 21·4 in the thirty-two provincial towns. The lowest rates in these towns were 12·7 in Croydon, 13·1 in Huddersfield, 13·5 in Brighton, 15·5 in Bristol, and 15·9 in Leicester; the highest rates were 27·6 in Sunderland, 27·7 in Burnley, 27·8 in Liverpool, 30·5 in Salford, and 32·3 in Blackburn. The 4011 deaths included 583 which were referred to the principal zymotic diseases, against 895 and 670 in the two preceding weeks; of these, 203 resulted from diarrhœa, 121 from measles, 95 from diphtheria, 74 from "fever" (principally enteric), 47 from whooping-cough, 42 from scarlet fever, and 1 from small-pox. No fatal case of any of these diseases was registered last week in Derby; in the other towns they caused the lowest death-rates in Brighton, Portsmouth, Plymouth, and Nottingham, and the highest rates in Oldham, Swansea, Burnley, and Blackburn. The greatest mortality from measles occurred in Salford, Oldham, Swansea, and Blackburn; from whooping-cough in Wolverhampton; from "fever" in Oldham, Burnley, Bolton, and Sunderland; and from diarrhœa in Manchester, Swansea, Blackburn, and Burnley. The 95 deaths from diphtheria included 61 in London, 3 in West Ham, 4 in Birmingham, 3 in Cardiff, and 3 in Wolverhampton. One fatal case of small-pox was registered in London, but not one in any other of the thirty-three large towns. There were 114 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 26th ult., against 198, 158, and 119 at the end of the three preceding weeks; 14 new cases were admitted during the week, against 17, 9, and 7 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2833, against 2802, 2827, and 2838 on the three preceding Saturdays; 269 new cases were admitted during the week, against 252, 332, and 241 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 158, 175, and 215 in the three preceding weeks, further rose to 235 last week, but were 137 below the corrected average. The causes of 57, or 1·4 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Cardiff, Bradford, Newcastle-on-Tyne, and in twelve other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Leicester, Liverpool, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·3 and 18·7 per 1000 in the two preceding weeks, rose again to 18·9 during the week ending Oct. 26th, but was 0·8 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 15·8 in Edinburgh and 16·9 in Dundee to 20·3 in Glasgow and 21·1 in Paisley. The 545 deaths in these towns included 21 which were referred to diarrhœa, 12 to "fever," 11 to whooping-cough, 10 to scarlet fever, 9 to diphtheria, 2 to measles, and not one to small-pox. In all, 65 deaths resulted from these principal zymotic diseases, against 94 and 91 in the two preceding weeks. These 65 deaths were equal to an annual rate of 2·3 per 1000, which was 0·6 per 1000 below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had declined from 62 to 53 in the three preceding weeks, further fell to 21 last week, of which 6 occurred in Glasgow and 5 in Dundee. The deaths referred to different forms of "fever," which had been 8 and 7 in the two preceding weeks, rose again to 12 last week, and include 9 in Glasgow and 2 in Edinburgh. The 11 fatal cases of whooping-cough were within two of the number in the preceding weeks, and included 5 in Glasgow. The deaths from scarlet fever, which had been 4, 7, and 9 in the three preceding weeks, further rose to 10 last week, of which 6 occurred in Glasgow and 2 in Edinburgh. The fatal cases of diphtheria, which had increased from 2 to 6 in the three preceding weeks, further rose to 9 last week, and included 4 in Edinburgh and 3 in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 97 and 92 in the two preceding weeks, rose again to 130 last week, and were 16 above the number in the corresponding week of last year. The causes of 34, or more than 6 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 26·8 and 24·2 per 1000 in the two preceding weeks, further declined to 20·7 during the week ending Oct. 26th. During the past four weeks of the current quarter the death-rate in the city has averaged 23·3 per 1000, the rate during the same period being 17·1 in London and 17·6 in Edinburgh. The 139 deaths registered in Dublin during the week under notice showed a decline of 23 from the number in the preceding week, and included 15 which were referred to the principal zymotic diseases, against 29 and 20 in the two preceding weeks; of these, 6 resulted from diarrhœa, 5 from "fever" (principally enteric), 2 from whooping-cough, 1 from small-pox, 1 from scarlet fever, and not one either from measles or diphtheria. These 15 deaths were equal to an annual rate of 2·2 per 1000, the zymotic death-rate during the same period being 2·5 in London and 2·7 in Edinburgh. The fatal cases of diarrhœa, which had been 17 and 12 in the two preceding weeks, further declined to 6 last week. The deaths referred to different forms of "fever," which had been 6 and 4 in the two preceding weeks were 5 last week. The mortality from whooping-cough showed an increase, while the mortality from scarlet fever was below that recorded in the preceding week. The 139 deaths in Dublin last week included 18 of infants under one year of age, and 32 of persons aged upwards of sixty years; the deaths of infants showed a further marked decline from those recorded in recent weeks, while those of elderly persons showed a slight increase. Five inquest cases and 6 deaths from violence were registered; and 45, or nearly a third, of the deaths occurred in public institutions. The causes of 9, or nearly 7 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

BRIGADE-SURGEON-LIEUTENANT-COLONEL O'FARRELL has arrived in England on transfer to the Home Establishment, and his successor, Brigade-Surgeon-Lieutenant-Colonel Macnamara, has arrived in Cairo. Surgeon-Colonel Maxham has embarked for South Africa in relief of Surgeon-Colonel Hamilton. Surgeon-Captain Macdonald has been transferred to Gosport, Surgeon-Captain Doyle to Cork, and Surgeon-Lieutenant Prynne to Alderney. Surgeon-Captain Maturin has arrived from Gibraltar on completion of a tour of service.

ARMY MEDICAL STAFF.

Brigade-Surgeon-Lieutenant-Colonel Henry William Alexander Mackinnon, D.S.O., retires on retired pay.

INDIA AND THE INDIAN MEDICAL SERVICES.

The following promotions are made in the Bombay Medical Establishment:—Surgeon-Majors to be Surgeon-Lieutenant-Colonels:—J. W. Clarkson and J. Parker. Surgeon-Captain to be Surgeon-Major:—C. J. Sarkies. Surgeon-Captain F. E. Swinton succeeds Brigade-Surgeon-Lieutenant-Colonel Hay as Personal Assistant to the Principal Medical Officer, Bombay Command, the latter officer having vacated the appointment on transfer to the Civil Department. Surgeon-Lieutenant-Colonel F. C. Barker and Surgeon-Captain W. E. Jennings have respectively delivered over and received charge of the Rajkot Prison. Surgeon-

Major J. Crimmin, V.C., and Surgeon-Major M. Collie have respectively delivered over and received charge of the Ratnagiri Prison. Surgeon-Captain A. L. H. Dixon, A.M.S., retires from the service, receiving a gratuity.

NAVAL MEDICAL SERVICE.

The following appointments are notified:—Fleet-Surgeon R. S. P. Griffiths to the *Alexandra*. Staff-Surgeons: C. A. Macaulay to the *Pembroke*; A. Patterson to the *Endymion*; M. Ronan to the *Warspite*; Herbert Canton to the *Immortalité*; J. L. Lambert to the *Narcissus*; Hugh W. Macnamara to the *Cordelia*. Surgeons: M. L. B. Rodd to the *Grafton* and *Redpole*; F. E. Rock to the *Endymion*; R. T. A. Levinge to the *Vernon*; F. D. Lumley to the *Pigmy*; F. J. A. Dalton to the *Plover*; E. D. Minter to the *Pembroke*; J. C. Durston and P. M. May to the Hong Kong Hospital; H. N. Stephens to the *Centurion* for the *Esk*; W. B. Macleod, M.B., to the *Hearty*; J. H. Pead to the *Alacrity* and for recommissioning; A. E. Kelsey to the *Daphne*; H. Harris and W. Spry to the *Grafton*; E. S. Miller and H. H. Pearce to the *Wildfire*; Cecil H. Rock to the *Vicid*; Thomas W. Phillip to the *Jackal*; Edward S. P. Eames to the *Blenheim*; John M'Ellwell to the *Centurion*; Walter J. Bearblock to Plymouth Hospital. Surgeon and Agent: W. J. Carmichael at Collieston.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant-Colonel Samuel Smith, having resigned his Volunteer appointment, ceases to be an Officer of the Army Medical Reserve of Officers. Surgeon-Lieutenant Francis James Lewis Warwick, M.B., 1st Tower Hamlets Volunteer Rifle Corps, to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Rifle: 2nd Volunteer Battalion the Queen's (Royal West Surrey Regiment): Surgeon-Lieutenant T. J. Schollick resigns his commission. 1st Volunteer Battalion the Royal Fusiliers (City of London Regiment): Surgeon-Lieutenant R. J. Hughes resigns his commission. 2nd Volunteer Battalion the Hampshire Regiment: Surgeon-Captain R. T. Cæsar to be Surgeon-Major. 1st Dumbartonshire: Surgeon-Captain T. F. Macdonald, M.B., resigns his commission. 26th Middlesex (Cyclist): Surgeon-Lieutenant R. S. O. Dudfield, M.B., resigns his commission.

THE CHITRAL EXPEDITION AND ENTERIC FEVER.

We learn that, notwithstanding the great care that was taken in regard to the camping grounds and water-supply for the troops on the late expedition, enteric fever broke out in some of the British regiments composing the force. The Commander-in-Chief in India during his recent tour of inspection ordered that samples of the water used by the troops at various camps should be forwarded for chemical and bacteriological examination. We need scarcely point out, however, that it does not at all follow that the samples so forwarded will be identical with the water which was consumed at the time of the outbreak. The conditions may have altogether altered in the meantime; and it is also possible that some of the corps affected in the field may have brought the disease with them from their cantonments. It is alleged in the *Pioneer Mail* of the 3rd ult. that in the wing of the Derbyshire Regiment at Benares all the drinking-water has been boiled since April 1st last, but the results as regards the prevalence of enteric fever have not been at all encouraging. An experiment of this kind is not conclusive, however; although the water may have been boiled for the troops, we cannot be sure that they all drank it or that the boiled water was not subsequently contaminated by being passed through fouled barrack-room filters, to say nothing of the men having consumed impure water in the drinks supplied them in the bazaar. It is a singular fact that enteric fever is one of the scourges of all European armies in the field, and nothing should be left undone to discover and remove, if possible, the causes of this being so. Although we regard contaminated water as one of the most direct and best-established causes of enteric fever, we do not feel at all warranted in saying that it is the exclusive cause. There is still much to be learned about the causation of enteric fever in tropical and subtropical climates, and still more, perhaps, as to the best practicable methods of preventing it on service.

PORTABLE INCINERATORS ON FIELD SERVICE.

It has been suggested that incinerators should in future become a regular part of the camp equipment of Indian campaigns. No doubt incinerators would prove most useful in various ways, especially in sanitation. That is quite obvious but what is not by any means so obvious is the practicability of applying the suggestion. Every ounce of weight to be carried is of importance in a campaign. In every military expedition the great difficulty to be overcome is transport. It amounts to a platitude to say that the multiplication of impedimenta to meet all required needs may become such as to put all rapid movement of a force out of the question, and military success is, after all, the paramount object of warfare. It has also been suggested that portable steam disinfectors should be taken on service, but it seems to us that it might be better and cheaper in the end to burn all infected clothing at once under such circumstances instead of attempting to disinfect it by heat. In favour of incinerators, it may be said that, in addition to their utility in effectually destroying camp refuse of all kinds, they could be employed for this and other purposes. As regards fuel, a proposal of the late Professor de Chaumont, we believe, about the employment of petroleum under certain circumstances might be worth consideration. Our wars in India and elsewhere are seldom on a large scale and commonly in very difficult countries as regards the use of wheeled transport, and are very different in these respects from big Continental wars. At the base of operations and at large temporary camps on the line of communications the supply of incinerators might be practicable; they would certainly be very beneficial in many ways.

AN EXAMPLE WORTHY OF IMITATION.

A wealthy French lady named Furtado-Heine has given her villa at Nice to the Minister of War with a view to its conversion into a "residence of repose" for fifty officers belonging to either land or sea forces. The donation comprises an annuity to cover all expenditure incurred on account of the sick officers as well as the up-keep of the premises and the wages of the *personnel*. What a boon an institution of this description would be to many an officer in our army whose health has broken down in India or elsewhere and whose relations are not rich enough to give him all the comforts necessary for his recovery. It is greatly to be desired that the example afforded by this generous lady may find imitators on this side of the Channel. It would be impossible to devise a more popular and patriotic means for utilising superfluous funds.

DEATHS IN THE SERVICES.

Inspector-General Sir Wm. Mackenzie, K.C.B., C.S.I., at his residence in London on Oct. 29th. He entered the Madras Medical Service in 1835, was Field-Surgeon with Lord Strathnairn in Central India 1857–58, and was appointed Hon. Physician to the Queen in 1857.

THE VOLUNTEER OFFICERS' DECORATION.

The Queen has conferred the Volunteer Officers' Decoration upon Surgeon-Lieutenant-Colonel Charles Cormack Greig, 2nd Volunteer Battalion the Gordon Highlanders.

MATRONS' COUNCIL.—At a meeting of the above society, held in the Medical Society's rooms on Oct. 24th, 1895, Mrs. Bedford Fenwick in the chair, a paper was read by Miss Isla Stewart, matron of St. Bartholomew's Hospital, on the subject of a Uniform Curriculum of Training for Nurses. The replies received from matrons and others to a number of questions bearing on the subject were taken up in detail, special attention being directed to the very full expression of opinion from Miss Nightingale. The ease with which ignorant and unsuitable women, of little or no training, obtain work as fully-trained nurses was pointed out, and it was urged that State registration of certificated nurses was the only means of adequately combating this evil. A preliminary course of training and a preliminary examination were advocated, as enabling the authorities to more properly discriminate between candidates and insuring a smaller number of failures during the first year of training, to the great benefit of the hospital patients and the permanent nursing staff. Other questions discussed in the paper were: the manner in which the three years of training should be spent, the establishment of a central board of examiners, the form of certificate to be granted by hospitals, and whether payment or entrance fee should be demanded of the nurses. Discussion on the subject followed, and at the conclusion of the meeting a motion was unanimously carried approving of a uniform curriculum of training for nurses.

Correspondence.

"Audi alteram partem."

DUBLIN INFECTIOUS HOSPITALS SCHEME.

To the Editors of THE LANCET.

SIRS,—I have read with deepest interest your leading article upon the attitude of the council of the Dublin Sanitary Association towards the draft scheme, prepared by the superintendent medical officer of health of the city of Dublin, "for the formation of a board for establishing hospitals for infective diseases in the county Dublin."

Although I have the honour to be the President of the Dublin Sanitary Association I do not presume to speak on behalf of the council of that body, which will at the proper time, no doubt, justify the deliberate conclusion at which it has, after due consideration, arrived in regard to Sir Charles A. Cameron's scheme. In my private capacity, however, I desire to make a few remarks upon a topic with the bearings of which I may without presumption claim to be familiar. You say: "The county of Dublin is about to institute an organisation for the isolation of infectious diseases, and the draft scheme has been prepared for submission to Parliament." This, Sirs, is not an accurate statement. The draft scheme has indeed been prepared. It has also been explained to a meeting of representatives of the public bodies concerned, all of whom were very careful to make it perfectly clear that they were present to hear, but not to vote for or against, the scheme. They went to the meeting on Oct. 10th invested with neither power nor authority by the bodies of which they were the delegates. Several of these bodies have since that meeting considered the scheme and repudiated it. The board of guardians of the Rathdown Union have refused to coöperate in any way in the scheme. The Kingstown Township Commissioners have decided to take no further action with reference to it. The Commissioners of the important and wealthy Pembroke township do not approve the scheme and have refused to send representatives to serve on a subcommittee appointed to carry out details. Thus one-half of the "County Dublin" has already declared itself dead against the scheme, which is a "City of Dublin" scheme from beginning to end.

In discussing the first objection urged by the council of the Dublin Sanitary Association you speak of removing "infectious patients from the six or seven general hospitals and similar institutions *in which* such patients are now treated." What do you mean by the words "*in which*"? Surely it is a notorious fact that no general hospital in Dublin receives into its wards infectious patients other than those suffering from typhoid fever. The fever blocks attached to these hospitals are isolated in the grounds surrounding the main buildings. This is the case at the Meath Hospital, Sir Patrick Dun's, the Adelaide, the City of Dublin, and Steevens' Hospitals. Into these fever blocks, further, small-pox has never been received since 1878. As regards other infectious fevers there is, so far as I know, not a scintilla of proof—if you will, it has yet to be proved—that typhus, scarlet fever, or measles has ever spread from the isolated fever wings into the main hospital buildings. In some cases the fever wings are perhaps not all that they should be, but this is a matter of detail. In the face of this explanation you will hardly stand by your answer to the second objection of the council of the Dublin Sanitary Association that the scheme practically deals with one disease only—namely, small-pox. You write: "This argument, however, altogether ignores the fact that other specific infections easily traverse the smaller air spaces comprised *within one and the same institution*, and that the abandonment of the practice of *receiving scarlet fever and similar diseases in the general hospitals* of London and elsewhere has been brought about as the result of the experience that such cases could not *be received into the hospitals in question with safety to the other patients*." No such state of things has existed in Dublin for at least fifteen years. I am glad you frankly admit the force of the third objection of the council to the scheme. It will be bad enough to substitute salaried medical officers for the independent clinical physicians who at present attend fever patients in the epidemic wings of the general hospitals. But it will be nothing short of a disaster to the public, as well as to the profession, if medical students are discouraged from studying fevers by such a change of teachers and by the removal to a distance of their "fever cases." As to the last objection of the council, you say it "is one which carries but little weight." I cannot doubt that this is really your deliberate opinion, but possibly your experience lies among the Anglo-Saxon rather than among the Irish poor. For thirteen years I acted as physician to Cork-street Fever Hospital; for more than twenty years I have been physician to the Meath Hospital; and from this experience I emphatically dissent from your conclusion. The lower orders among an Irish population dread the very name of a fever hospital, and the difficulty of inducing parents to send their sick children to hospital is enormously increased when the order is for a fever hospital and not for the fever wing of a general hospital. I gladly accord my tribute of praise to the present resident medical officers of Cork-street Fever Hospital for the manner in which, by tact and kindness, they have within recent years succeeded in making that institution comparatively popular, but Dr. J. Marshall Day and his colleagues will, if I mistake not, bear me out in what I have stated.

The council of the Dublin Sanitary Association, in the preamble to its objections, distinctly recognised the advisableness of providing adequate and safer accommodation for the treatment of patients suffering from small-pox and other infectious diseases in Dublin and its vicinity, as well as the urgent necessity which exists for the establishment of convalescent homes for patients recovering from such infectious diseases and of refuges for the reception of the inmates of infected houses. But these desirable reforms could all be carried out by a liberal interpretation and enforcement of Sections 149 and 155 of the Public Health (Ireland) Act, 1878, without the necessity of going to Parliament with a revolutionary, cumbrous, unwieldy, unpractical, and unworkable scheme which in one short fortnight has been spurned by half the people who were to work it.

I am, Sirs, your obedient servant,

JOHN WILLIAM MOORE, M.D. Univ. Dubl., F.R.C.P.I.,
Senior Physician to the Meath Hospital, and Consulting Physician to Cork-street Fever Hospital, Dublin.

Fitzwilliam-square-west, Dublin, Oct. 28th, 1895.

*** In answer to Dr. J. W. Moore's question as to the meaning of the words "*in which*," we would say that we regarded "in which" as referring to the treatment of the infectious cases within the precincts of the same institution; and we had regard to the fact that, unless the whole administration of a fever block was entirely distinct from that of other blocks, there was risk of communication of disease from one block to the other. As regards diphtheria, the danger is probably a still greater one; the experience of the Metropolitan Asylums Board as to this is more than suspicious. Our reference to "the smaller air spaces" was governed by similar considerations.—ED. L.

"THE BATTLE OF THE CLUBS."

To the Editors of THE LANCET.

SIRS,—A representative committee of seven medical men practising in Taunton and the surrounding district has been formed to consider what measures can be taken to prevent the increasing abuses connected with club practice. I understand that the medical men at Bridgwater (Somerset) have declined to accept the terms offered by the National Medical Aid Company, which has sent another medical practitioner to the town.

I am, Sirs, yours faithfully,

Shrapnels, Taunton, Oct. 28th, 1895. C. E. ABBOTT.

To the Editors of THE LANCET.

SIRS,—As a small contribution to the history of "the Battle of the Clubs," the following facts may be of some interest to your readers. In a Midland town of about 50,000 inhabitants, chiefly composed of the industrial class, several agents are at the present time employed by a certain insurance company in a thorough canvass of the town. As an inducement to take out policies, these men are offering to provide insurers above fourteen years of age with free medical attendance, and in addition to give the same attendance to all members of the family under this age for

a weekly payment of one halfpenny each. Nor is this offer without warrant, because when illness does occur a medical man drives up in a smart victoria, the coachman's hat being decorated with a cockade.

I am, Sirs, yours faithfully,

Oct. 29th, 1895. ADMIRER.

To the Editors of THE LANCET.

SIRS,—At the annual meeting of Convocation of Victoria University, held at Manchester on Wednesday, Dr. John Brown moved a resolution, which, in view of the forcible articles now appearing in your pages under the title "The Battle of the Clubs," will be read with particular interest: "That, in the opinion of Convocation, it is desirable that medical graduates of Victoria University should decline to accept any appointment of any medical aid or similar association in which the conditions of the appointment are such as to degrade the professional man to the position of a paid servant in a trading company." The motion was not proceeded with, but I submit that it is the kind of action taken by Dr. John Brown that is most required if the profession at large is to preserve its self-respect and independence. I am, Sirs, yours faithfully,

Kensington, Oct. 31st, 1893. M.B.

UNQUALIFIED ASSISTANTS AND THEIR PRINCIPALS.

To the Editors of THE LANCET.

SIRS,—In your issue of the 26th inst. I notice that you have drawn the attention of your readers to an inquest held the previous week in the Newington Mortuary (S.E.) on the body of Ellen Preswell, an infant of seven weeks. The mother resided at 77, Pollock-road, Walworth, and was confined of twins early in September. In commenting on this case you state that you have derived *all* your information from the *Daily Telegraph*, and you add further that you shall be glad if there be any incorrectness in your version of the facts to have them corrected by the principal in the case. I gladly avail myself of your kind offer. The report is not correct, because, in the first place, it would make it appear that my assistant attended Mrs. Preswell in her accouchement; and, secondly, that he received a fee *for* so attending.

Such is not the case. I, personally, attended her, and, with the exception of the nurse, no one else, certainly no medical man, was present during her delivery. The mother afterwards made a very good recovery, but of the children I had very slight hopes. It is quite true that my assistant paid a few visits to Mrs. Preswell when she was in the convalescent stage, and on one of these occasions he received *my* fee for attending her. There is nothing wrong about that, I think—nothing, in my opinion, to justify the use of the word "fraud," nor for the insinuation that I allowed my unqualified assistant to do the most important part of my work. Although, from the beginning, I had very little hopes of either of the infants surviving, I refused a certificate on the death of the second child as a protest against what appeared to me to be negligence on the part of those most responsible for seeing it was properly attended to. It is not because the child was of premature birth and delicate that every care should not be taken to preserve its life or prolong its existence. At any rate I did not, under the circumstances, feel justified in giving a certificate, and as my conscience rules my conduct, I am afraid under similar conditions I would again feel obliged to refer the matter to the coroner. My assistant did *not* give a certificate in the case of the child first dead. When she applied for it I was ill in bed, and to save me the trouble he simply filled in the blank spaces and I certified the cause of death. I could, of course, do so in this case, as the interval between birth and death was comparatively short, besides having warned the mother when the child was born that more likely than not she would not be able to rear it. The other I had not seen for some weeks previous to its death. Was I not right to refuse a certificate? I think so.

"Unqualified assistant" seems now to be a term of reproach. Why I know not. Many men that I know of passed creditably every examination but the Final, and previous to its coming off were obliged through death or unexpected reverses of fortune to leave their college and earn their own living. Many of those men to my knowledge led, even as students, exemplary lives; some of them gave evidence of superior intelligence—and are they now, after the years they spent studying medicine, to be precluded from earning their living as assistants? I should hope not. It was misfortune—not their fault—that obliged them to abandon a profession they would have adorned. Such a man was my late assistant. In the notice printed in THE LANCET above the advertisements affecting those gentlemen you state that the General Medical Council do not object to their being employed by practitioners when resident in or near their employers' houses. Permit me to state that my assistants are always under my immediate supervision. We work at the same surgery, and I always take the greatest precaution before accepting the services of unqualified men to warn them that none of the privileges which principals have imposed upon them by the General Medical Council must be ever broken through. Whether those conditions were broken through in this case or not your readers can now see for themselves. I certainly do not think so.

I am, Sirs, yours faithfully,

JAMES J. PHELAN, L.R.C.S. Irel., &c.

84, Rodney-place, New Kent-road, S.E., Oct. 31st.

THE SURGICAL ASPECT OF TUBERCULOSIS.

To the Editors of THE LANCET.

SIRS,—In common with many of your readers, I have read Mr. Treves' address in THE LANCET of Oct. 26th with great interest. It is refreshing to read his vigorous comments on the use of that "ghostly relic of the past"—the word "scrofula." So-called "tonics," cod-liver oil, and iodine paint he dismisses with as much contempt as on previous occasions he has dealt with that belated ghost, the linseed poultice. May they all be comfortably buried in the nineteenth century. There is, however, one point in Mr. Treves' paper that I think deserves greater emphasis—viz., the importance of insisting on climatic treatment in the earliest stage of surgical tuberculosis. This principle is readily admitted in theory, but, judging from my own experience, is not always acted upon in actual practice. It is pitiable to see the hopelessly incurable cases that drift down to this district after they have wasted valuable months and even years in trying the effects of "hypophosphites," cod-liver oil, and so-called tonics. The profession and the public have at last recognised the uselessness, if not cruelty, of sending cases of advanced pulmonary tuberculosis to linger and die away from home. Is it too much to ask that surgical tuberculosis should be considered from the same standpoint? I am quite aware that the tubercle bacillus in attacking the lung is attacking a vital organ; at the same time the analogy is sufficiently exact to demand a similar method of treatment. There are dozens of excellent health resorts in England adapted for cases of surgical tuberculosis; in fact, they outnumber by ten to one the resorts suitable for cases of pulmonary disease, because in the treatment of the former a calm and equable temperature is not of such great importance. Much more could be said on this subject, but I do not wish to labour the point. We who live away from crowded cities are able to testify to the sometimes extraordinary effects of plenty of fresh air and sunshine with appropriate surgical treatment. I am glad to see such a distinguished authority as Mr. Treves protesting against over-operating in gland cases. Many glands that I have reluctantly given the benefit of the doubt have disappeared, to my surprise, without the use of the knife, tonics, or even hypophosphites. I know of few problems more difficult to decide than the exact time to operate in some cases of tuberculous glands. I trust that it may not be presumptuous for a provincial practitioner to have called special attention to the importance of the climatic treatment of tuberculosis of bones, joints, and glands at the earliest possible period, and that this variety of the disease should be treated on the same principles as obtain in the treatment of tuberculous phthisis. I am, Sirs, yours faithfully,

Margate, Oct. 29th, 1895. BERTRAM THORNTON.

INFECTIOUS DISEASES IN MAN AND BEAST: A SUGGESTION.

To the Editors of THE LANCET.

SIRS,—The subject which I venture to bring before your readers is of such wide scope that I must condense my remarks as much as possible. It is now fully recognised,

and every day becoming more apparent, that the infectious diseases of man and the inferior animals are in many cases identical, or at least due to a common cause. Anthrax is common to men and animals, in the former assuming the varied forms of malignant pustule and wool-sorters' disease. Hydrophobia is common to men, dogs, cats, &c. Diphtheria is found in birds and seems to have been transmitted through them to human beings. The relations between scarlatinal disease in the cow and in the human subject are of pressing interest and importance. These are merely examples; I purposely refrain from extending the list to save space. What I wish to urge is that an establishment or establishments should be made in the United Kingdom where the infectious diseases of animals could be practically studied by members of our profession, by veterinary surgeons, and by laymen who were interested in cattle, horses, &c. This may seem to be rather a "mixed" interest; but a moment's reflection will show that it is a "common" interest, since those different classes of men would be furnished with an opportunity of studying subjects which are of intense interest and importance to them all, and the result of such study would be a benefit to mankind and the lower animals. For our profession it would mean a saving of human life and suffering, in the case of veterinary surgeons it would mean success in checking epidemics among horses and cattle, and in the case of agriculturists it would mean a saving of stock and consequently of money. It seems to me that these interests form a very wide and strong basis, and one which should ensure State recognition and support. Of course, as a member of the medical profession, I write in the interests of humanity, but my cause is strengthened by the pleas of benefits to the lower creatures and the saving of money to stockholders. Are there not establishments of this kind on the Continent? Why should we, a rich and practical people, lag behind in such good and necessary measures? If Dr. Thorne Thorne, the worthy medical chief of the Local Government Board of England (who has rendered such valuable services to public health), should see fit to take the matter up it would soon be carried to a successful issue.

I remain, Sirs, your obedient servant,

JAMES W. ALLAN, M.B. Glasg.

India-street, Glasgow, Aug. 5th, 1895.

"THE ADMINISTRATION OF OATHS IN COURTS OF LAW."

To the Editors of THE LANCET.

SIRS,—With respect to your annotation in this week's issue (p. 1058), in which you say you have been unable to discover when the practice of kissing the Testament commenced, I beg to say that in "Haydn's Dictionary of Dates," fifteenth edition, 1876, p. 521, under "Oaths," it is stated: "Oaths were taken on the Gospels so early as 528, and the words 'So help me God and all Saints' concluded an oath until 1550." The authority for this statement is not given, but if substantiated it would show that the *use* of the Gospels (irrespective of kissing the same or not) is of very ancient date. I merely mention this as an interesting point in history. I have always thought kissing the Book most objectionable on all grounds.

I am, Sirs, yours truly,

J. E. BULLOCK, M.D.Brux.

Ladbroke-grove, Notting-hill, London, W., Oct. 28th, 1895.

DEATH RETURNS IN THE STRAITS SETTLEMENTS.

To the Editors of THE LANCET.

SIRS,—In the "Notes from Singapore" in your issue of Aug. 31st there are two mis-statements which I appeal to your sense of fair-play to correct. The first occurs under the heading, "The Government and the Municipality," and is as follows: "The death return for April was delivered by the Government to the municipal authorities so late as June 1st; that this was the first special indication to the medical officer of health that the death-rate in April was so unusually high." The second mis-statement is under the heading, "The Present System of Registration," &c., and is as follows: "In this way this official is kept in total ignorance of the death-rate of the district which is his special care, and he can have no guide or indication which might lead him to suspect the presence of any unusual fatal element until some weeks later." The real fact (entirely omitted by your correspondent) was, and is, that a return of the number of deaths registered by each deputy-registrar within the municipal area was supplied immediately, *every week*, to the municipal health officer. This fact was publicly mentioned by the president in the municipal council,[1] and on July 8th the president of the municipality wrote to the Government: "I have carefully gone over with the municipal health officer the weekly death returns for the months of April, May, and June last, as supplied to him by the registrar-general." It is to be regretted that, owing to the distance between this place and London, your correspondent's report should have had so long a circulation uncorrected.—I am, Sirs, yours faithfully,

MAX. F. SIMON, M.D.,

Principal Civil Medical Officer and Registrar-General of Births and Deaths, Straits Settlements.

Singapore, Oct. 1st, 1895.

*** We have received a communication to the same effect from Dr. W. R. C. Middleton, medical officer of health for Singapore. We regret to have been misinformed by our correspondent.—ED. L.

ANNUAL MEETING AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

To the Editors of THE LANCET.

SIRS,—Will you kindly allow me to call the attention of Members of the Royal College of Surgeons of England to the fact that the annual meeting of Fellows and Members takes place on Thursday, Nov. 7th, at 3 o'clock P.M. precisely, at the College, Lincoln's-inn-fields? Members are urgently requested to attend on that day and give their support to important resolutions affecting the welfare of the Members and the government of the College which will be submitted to the meeting by the Society of Members of the College.

I am, Sirs, yours obediently,

JOSEPH SMITH,

President of the Society of Members of the Royal College of Surgeons of England.

THE THERAPEUTIC VALUE OF INTESTINAL ASEPSIS.

To the Editors of THE LANCET.

SIRS,—I was much interested in reading in THE LANCET of Oct 26th the remarks of Dr. Williams on the treatment of typhoid fever by the antiseptic method of using chlorine. I wish only to say that as far back as 1857, during my apprenticeship in Yorkshire, we used this treatment for a severe epidemic of scarlet fever, and since that time I have always used chlorine in the treatment of enteric fever with the very best results; so that this way of prescribing can hardly be attributed in the first place to Dr. Yeo.

I am, Sirs, yours truly,

Harrow-road, Oct. 29th, 1895. A. L. GRIFFITH.

THE VALUE OF COD-LIVER OIL.

To the Editors of THE LANCET.

SIRS,—On reading Mr. Treves' learned discourse on the Surgical Aspect of Tuberculosis, published in THE LANCET of Oct. 26th, I was much struck with the following paragraph on the treatment of this disease. "Tuberculous subjects, especially children, appear to be benefited by taking an extra amount of fatty matter in their food during the cold weather. This can be supplied in the form of fat, butter, or cream. There is no excuse, so far as I am aware, for the administration of cod-liver oil. In all probability there is no more nauseous form of fat to be found, and I am not aware that it contains any chemical quality other than that of oil. ..... If adults like this oil by all means let them take it; but it is unkind to force it upon children," &c. Now, in view of the fact that practically every surgeon orders cod-liver oil in this and other diseases, and also that children so thoroughly dislike it, I think that you would be doing the profession and public a kindness if you allowed the active and special advantages of this fat above ordinary fats

[1] See Straits Times of July 4th.

and butter (for not many patients can get cream) to be discussed in your columns. Personally I have seen children who were taking the ordinary diet suitable to them, including butter and dripping, &c., improve markedly when ordered this oil as a medicine, and I have no doubt many other medical men have seen the same thing.

I am, Sirs, yours truly,

Oct. 28th, 1895. E. H. W.

THE BATTLE OF THE CLUBS.

(FROM OUR SPECIAL COMMISSIONER.)

(*Continued from p. 1071.*)

DISUNION IN THE PROFESSION AND SLATE CLUBS AT GREAT GRIMSBY.

EVERY one of the towns so far visited in the course of this inquiry possesses a medical society. An effort to group and organise the medical profession has been made. The union may not be so complete or so far-reaching in its purpose as is desirable, still some sort of organisation exists. It seemed, therefore, that it was time to visit a town where there is absolutely no organisation and where the medical profession has never sought to act in union. For this purpose I selected Great Grimsby. It is a new town which has grown with the railways that rendered the inland fish trade possible. At the same time it is a town that has a population composed almost exclusively of fishermen, workmen, and business men. Under such circumstances the population is not likely to very generally appreciate the sacrifices necessary to acquire the training and education by which alone a practitioner can obtain his qualifications. The tendency is to estimate the value of a medical man's work by what he actually does in the presence of the patient, and by the medicine he gives him, and no allowance is made for his previous expensive studies. Thus it often happens that patients refuse to pay fees unless a bottle of medicine is given them. They do not think much of the advice the medical man offers; but a bottle of medicine is something substantial, and they realise that it would not be honourable to take it without payment. They can go to a shop and talk to the shopman without paying, but they must pay if they take any of his goods away, and they look upon the medical man in the same light. They will take his advice gratuitously, but think themselves bound to pay for the medicine. Under these circumstances 2*s.* 6*d.*, including a bottle of medicine, is considered a somewhat high price. Medicine can be had much cheaper from a druggist. It is, therefore, difficult to explain to so unappreciative a people that the pay given to club medical men is inadequate. They not infrequently answer that they think the pay is very good and would be glad to do the same work for the same price, thus showing how completely ignorant they are of what the work is in itself and what previous study and labour are required. From people of this sort there is little or no hope of obtaining good fees. Grimsby is a town where there is plenty of work to be done, but for very small fees. It is not a town that offers any particular inducements to medical men, and in comparison with the number of the population there are not many practitioners established there. Those who have settled in the town have not shown any particular disposition to come together and work together. In the district of New Clee, which has been recently added to the borough of Grimsby, the principal local practitioners have met. They have formed no society, but they have spoken of their common interests and have agreed in an unofficial manner to help each other and to work together. This sort of friendly understanding does not constitute a union. The profession at Grimsby are therefore still disunited. Nor does there seem to be any hope for the present that a union will be constituted. This, I was assured, could only be done if some outside agency or person were to take the matter in hand. No local practitioner holds so pre-eminent a position and exercises a sufficient personal influence to take the initiative. The competition between the practitioners is so keen that, if any one of them took any decided steps with a view to form a medical union, his motive might be misinterpreted. It is with regard to such towns as Grimsby that a great national union could render efficient service. An appeal from some outside and respected authority should be made to the practitioners of the town, calling upon them to form themselves into a union, and this would probably meet with a favourable response.

It is needless to say that, with so large a working-class population, there are many benefit societies at Grimsby; but the speciality of this town seems to consist of slate clubs organised by public-house keepers. There is much to be said in favour of the purpose for which friendly societies were originally constituted, but this scarcely holds good with regard to public-house slate clubs. To secure medical aid for people who are really too poor to pay the usual fee is a very good object, and the grievance against friendly societies is that they have departed from their original aim. But the public-house keeper has hit upon this very ingenious device for keeping his customers together, and proposes to take upon himself the trouble of organising for their benefit a slate club. The general terms are the payment of 6*d.* per week, the publican acting as cashier. Out of this sum of 26*s.* per annum there is paid to the medical officer of the slate club 2*s.* 6*d.* for each member and for each year. The disposal of the remainder of the money varies a little in different clubs. As a rule, a financial allowance is made to those members who fall ill during the course of the year. The great attraction, however, of the slate club is the fact that it is a yearly club. At Christmas all the money that remains in hand is equally divided among all the members. If there has not been much illness, there is a goodly sum to share among those members who have been regular in their payments; so that it sometimes happens that the members have returned to them at Christmas 10*s.*, sometimes 15*s.* or more, out of the 26*s.* they have paid in 6*d.* weekly instalments. This sum, coming at Christmas, is extremely useful. Then there is another great advantage. The publican does all the work; he organises and manages everything, and no one has the slightest fear that he will tamper with the money entrusted to his care. There is no bother about electing committees, secretaries, and treasurers, or obtaining registration under the Friendly Societies Act. The member of the slate club is spared all these anxieties and troubles, and he has to pay no fees for management: every penny he gives he gets back again either in cash or in kind. In one sense nothing could be more advantageous to the members—i.e., if one assumes that the members are all regular frequenters of public-houses. It is also easy to understand that it is in the publican's interest to take upon himself the trouble of organising a slate club which helps to keep his customers round his bar. They go there at least once a week to pay their subscriptions, and when at Christmas they receive their share of the balance remaining in hand a good portion of it may be spent over his counter.

If slate clubs afford considerable advantages to the members and the publicans who organise them the same cannot be said with regard to the medical officers engaged in this service. First of all, the allowance is only 2*s.* 6*d.* per member. Nevertheless, one medical practitioner assured me that he made a very good income from slate clubs. He pointed out that a great many of the members were fishermen, and when they required medical attendance they might be away fishing in some distant part. Some of them also belonged to friendly societies and were not certain to call for the slate club medical man. Then the slate clubs were in the main composed of men in the prime of life, so that, in the natural course of events, they would not require much medical care. Therefore, though the sum of 2*s.* 6*d.* was very small, there was not much work to be done. Also, as the members of the slate clubs were anxious to have as large a balance as possible remaining to be shared amongst them at Christmas, they took good care to keep out of their clubs unhealthy members.

Another practitioner whom I questioned on the subject did not take such a favourable view of this institution. He pointed out that it was to the interest of the publican to make hard drinkers members of his club, and this meant a great deal of work for the medical attendant. On the other hand, the publican must be careful to exclude men who were constantly ill, as this would prevent the benefits and thus disappoint the other members. Yet, again, it was objected that when one slate club got rid of a bad member he soon managed to gain entrance into some other slate club. However this may be, there is one point on which no doubt whatsoever can be entertained—namely, that there can be no such thing as a wage limit. If there was a wage limit it would be the other way about; for, instead of

seeking to prevent persons with good incomes from joining the club, the publican would find it suit his purpose best to keep the poor away. Thus it is that smack-owners, skippers of fishing boats, and others who make good yearly incomes are members of slate clubs, and by means of these institutions only pay 2*s.* 6*d.* a year for their medical attendance. The difficulty with regard to a wage limit, therefore, applies especially to the slate club; but this institution will be viewed with far greater apprehension by those who are more solicitous of the dignity than of the material interests of the profession. It is bad enough that medical men should be utilised as a sort of bait to enable touting agents to secure the payment of premiums for life insurances; still, if people are persuaded to insure their lives because medical insurance is thrown in as an extra inducement, there is nothing injurious, wrong, or immoral in the insurance of a life. But by becoming the medical officer of a slate club the practitioner practically lends his skill and science to promoting the interests of the publican.

Under these circumstances I was not surprised when one of the practitioners on whom I called explained that members of clubs entitled to the attendance of the medical officers of the clubs often only consulted them for slight ailments and, when anything serious occurred, called in a private practitioner and paid the usual fee. Another medical man told me that he was treating an entire family except the father, who was attended by his club medical attendant because, having to pay for his family, this man preferred that they should have someone other than his club medical officer. On the other hand, it must be recognised that some club officers lead a terribly hard life in this town. Seamen arrive with a large accumulation of wages in their pockets; this they spend in riotous living, and so rapidly that it would seem as if their sole object was to get rid of the money as soon as possible. Perhaps they have an instinctive feeling that the more quickly it is spent the less mischief will be done. Nevertheless, there is time enough for much disease to result. Practice among such a population is not pleasant, and at Grimsby there are very few better-class patients to relieve the monotony of attending either very poor people or a rough, though fairly well-paid, seafaring population.

Grimsby, Oct. 24th.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The School of Medicine.

IT is becoming gradually more and more difficult for any former student of the Liverpool Royal Infirmary School of Medicine to recognise his old school in the buildings of the Medical Faculty of the Liverpool University College. Formerly there was the second Royal Infirmary, a building defective from the very first in consequence of the architect having forgotten the stairs in his original plan, and in being a huge rambling pile of buildings. The School of Medicine was located in a small building the capacity of which was severely tested in 1860 by the rush of students who entered to escape the preliminary examinations. There was also the Lunatic Asylum and the Lock Hospital. Of all these buildings the last named is the only one which remains *in statu quo*. The third Royal Infirmary is as free from defects as its predecessor was full of them, being even in these days of almost daily improvements a model hospital. Of the old school building little remains, and before long it will in all probability have been entirely rebuilt. The buildings of the Liverpool University College occupy a considerable part of the adjoining space, which will soon be entirely covered with them. When these are completed the facilities for teaching chemistry and physiology will be equal to those of any medical school.

The Anatomical Rooms.

These continue to receive additions and improvements, and at the present time students possess ample facilities for the practical study of anatomy. Before long new buildings, which will add greatly to the comfort and convenience of Professor Paterson, his assistants, and the students, will be complete, while later it is hoped that greater accommodation for an increased number of students may be obtained.

Hospital Practice.

The proximity of the Royal Infirmary to the college induces the larger proportion of students to attend its practice. But the practice of the Royal Southern Hospital is recognised by all the examining bodies, and a certain proportion of students attend it. Before long there will be a new Northern Hospital on the site of the existing hospital, but with a greatly increased area, and efforts will be made by its medical staff to ensure the erection of a hospital which shall be in all respects worthy of "Greater Liverpool." The present hospital has for a long time past been wholly unequal to the demands made upon it.

Penetrating Wound of the Abdomen and of the Intestines.

Referring to the case of the woman admitted into the Northern Hospital under Mr. Puzey's care a fortnight ago, and given in detail in my last letter,[1] it is very satisfactory to state that she is still living and that there are hopes of her recovery. The injury was alleged to have been caused by her husband, who is not yet in custody. The case is of great interest both surgically and in its medico-legal aspect. It is certainly a triumph of surgery to change what might have been a charge of murder into one of wounding.

Oct. 29th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Edinburgh University Court.

AT a meeting of the Edinburgh University Court held last week various matters of medical interest were decided upon. The recognition of the two Edinburgh Schools of Medicine for Women was continued for another year under the original conditions. It was also agreed that the pathological gallery in the Museum should be open one day a week to women students in medicine. The Court also admitted women to the advanced courses in botany and natural history for purposes of graduation in science and to the class of physics for purposes of graduation in medicine. Professor Selby of University College, Cardiff, was recognised as a teacher whose course in physics should qualify for graduation in medicine, and the University of Sydney was recognised as a medical school, the classes at which should qualify for graduation in medicine at Edinburgh both for men and women.

General Council of the Edinburgh University.

The statutory half-yearly meeting of this body was held last week in Edinburgh, Sir W. Muir presiding. Dr. Heron Watson was reappointed an assessor in the University Court, and Dr. Joseph Bell was appointed, in succession to Dr. John Duncan who had intimated that he did not desire re-election. The report of the finance committee indicated that under the new arrangements the University exchequer was running dry, and it was suggested that a combined appeal should be made to the public for funds. This, however, was objected to as the time was not opportune for such an appeal and also in view of the diminution in the number of students.

St. Andrews Ambulance Association.

The annual meeting of the subscribers to this useful association was held last week. It appeared that during the past twelve years 9942 men and women had been trained in ambulance work. The association had also instituted a waggon service and had distributed letters through the town. The balance-sheet showed a balance of £116.

Opening of the Royal Medical Society, Edinburgh.

This society was to have been opened last week by an address from Dr. Clouston. This arrangement, unfortunately, had to be abandoned owing to the illness of Dr. Clouston.

Sir James Crichton Browne at Hawick.

Sir James Crichton Browne lectured last week at Hawick on Brain Rest.

The Pharmaceutical Society's Proceedings.

In the Dundee Sheriff's Court a grocer's assistant was last week charged under the Pharmacy Act with selling opium, which at the time formed an ingredient in a quantity of Powell's balsam of aniseed. A plea of guilty was tendered.

[1] THE LANCET, Oct. 19th, 1895.

The sheriff appears not to have sympathised with the prosecution, for he stated that if the sale of a substance, a mere ingredient of which was poison, was actionable it was sufficient for the prosecution of every publican and grocer in the city. He, however, after some differences with the counsel for the prosecution, accepted the plea, but said that if a case of the same kind was brought before him again it would require to be proved that the quantity of poison sold was likely to cause injury to health. The purpose of the Act was to protect the community and not to constitute a monopoly to any pharmaceutical or other society. The agent for the society stated that the Privy Council had compelled them to take proceedings. A fine of 1*s.* with expenses of £1 1*s.* was inflicted.

The Quatercentenary Celebration at Aberdeen.

The quatercentenary celebrations at Aberdeen University were duly carried out on Oct. 24th and 25th, but in consequence of the lamented death of Mr. Charles Mitchell, LL.D., which occurred last August, they were on a much less extensive scale than was originally contemplated. Mr. Mitchell's generous munificence has, among other advantages, enabled the University to erect a Graduation Hall and Students' Union, and to heighten and ornament the tower of the Marischal College. A clock and bell were also placed in the tower, and on Oct. 24th the clock was set in motion by Miss Mitchell, a daughter of the deceased donor, in presence of a very large assembly of members of the University and the general public. The handsome rooms composing the Students' Union were then formally opened, and the remainder of the day was filled up by divine service in King's College Chapel and social festivities. On Oct. 25th the Marquis of Huntly, who is the Lord Rector of the University, opened the new Mitchell Graduation Hall, and honorary degrees were conferred on a number of prominent individuals. In the afternoon the Lord Rector addressed a large audience his subject being entitled "Historical Interest," and the celebrations were brought to a close by a dinner and a torchlight procession in the evening.

Oct. 29th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Dinner to Sir Christopher Nixon.

A COMPLIMENTARY dinner was given to Sir Christopher Nixon on Thursday, Oct. 24th, on the occasion of his receiving the honour of Knighthood. The assemblage at the Shelbourne Hotel included many members of the medical as well as of the clerical and other learned professions. The chair was occupied by the Right Reverend Monsignor Molloy; and among the company were the Most Reverend Dr. McCormack (the Roman Catholic Bishop of Galway), the Lord Mayor of Dublin, Sir John Banks, K.C.B., and Mr. Henry Thynne, C.B.

The Banbridge Union.

A special meeting of the Banbridge board of guardians has been held with reference to a statement by Dr. Moorhead, honorary secretary of the Workhouse Medical Officers' Association, read before a meeting of the council of the Irish Medical Association, in which the Banbridge Union was put in the lowest class—those in which proper sanitary appliances, efficient nursing, and suitable furniture are absent—and that the guardians had declined to make any improvement. In reply to such a charge a guardian pointed out that the sanitary scheme was prepared by an eminent London engineer, that there are constantly three trained nurses, with others in case of emergency, and that the infirmary beds had woven wire and hair mattresses; the dietary also was second to none in such places in Ulster. Dr. Hawthorne, medical officer, said there was no foundation for Dr. Moorhead's statement, so far as the Banbridge Union was concerned. It was then resolved unanimously that, having considered Dr. Moorhead's statement and heard Dr. Hawthorne's report, the board considered the aforesaid statement to be unfounded, and that it should be publicly contradicted.

Burning Accidents in Belfast.

At an inquest on Oct. 22nd on a fatal case of burning in a child aged five years attention was drawn to the number of such cases in Belfast. It was the sixth inquest of the kind held by the coroner in October, and during the twelve months ending Aug. 31st 232 persons had been treated for burns in the Royal Hospital, and of that number thirty-two had succumbed to their injuries. In a large number of cases of this nature the victims are children who through the carelessness of their mothers are left alone.

The New County Monaghan Infirmary.

The old infirmary building, which was disposed of for £1000, has passed into the possession of the governors of the county Monaghan Asylum, and at present is used as an auxiliary house for the treatment of lunatics; while the old gaol at Monaghan is being converted into a new infirmary. At present the governor's house at the gaol is being used as a temporary infirmary. The work of alteration and reconstruction of the gaol into an infirmary will probably not be completed until spring.

The Outbreak of Fever at Ardboe, County Tyrone.

At the weekly meeting of the Cookstown guardians, held on Oct. 26th, Dr. Clibborn, Local Government Board inspector, reported he had gone over the infected district with Dr. Burgess, and referred in the highest terms to the way in which Dr. Burgess and the relieving officer had discharged their duty under circumstances of great difficulty. Dr. Clibborn suggested that the sanitary authority might make use of the provisions of the Labourers Act with a view to the gradual improvement of the dwellings of the labouring classes, especially in the infected districts, where the people live partly by fishing and partly by agricultural labour. It is probable that want of cubic space in the houses where these people live, combined with overcrowding and filth, has had to do with this outbreak of typhus fever.

The Battle of the Clubs at Cork.

It will be in the recollection of your readers that a Mr. Carroll took proceedings in the Cork Police-court for the recovery of sick pay from his club, a branch of the Irish Foresters. The magistrates gave him a decree for the full amount, but the case came on again on appeal recently before the Recorder. Counsel were engaged in the case. It was admitted that a very hostile feeling existed against Mr. Carroll because he had thought fit to call in the assistance of a medical man unconnected with the club. The counsel representing the appellants directed his attention principally towards endeavouring to extract from the Recorder an opinion hostile to the action of the Cork profession in opposing the encroachments of the clubs, but the Recorder, who has the reputation of being a very sound lawyer, simply confined his attention to the case before him and avoided all extrinsic subjects. It was stated that the committee of the club felt annoyed because they have "an uphill fight," and they considered Mr. Carroll had deserted them by not continuing under the care of the club medical officer. Dr. O. T. O'Sullivan, under whose care Mr. Carroll now is, stated in evidence that the unfortunate man has a cavity in one of his lungs. The Recorder animadverted very strongly on the action of the committee in refusing sick pay to such a patient, and confirmed the decision of the court below, with 40*s.* costs. It is to be hoped this will prove a salutary lesson for the Cork clubs in more ways than one.

The Cork District Lunatic Asylum.

At a meeting of the board of governors held recently there was a protracted discussion with reference to the necessity of providing increased accommodation owing to the various boards of guardians objecting to be responsible for the charge of harmless lunatics. The expenditure likely to be involved is naturally causing much anxiety to the governors. One speaker suggested that a new building would cost £200,000, and added that if the present "wave of lunacy" should subside a more or less useless tax would have been put on the ratepayers, and he accordingly suggested that one of the existing workhouses should be fitted up as an auxiliary asylum. Another governor stated that at the end of last year there were 2021 inmates in the asylum, that there are 500 lunatics in the workhouses of the county, and 400 idiots at large, and he said that if the 500 lunatics in the workhouses, with perhaps the whole of the 400 idiots, were sent to them, their establishment would become unmanageable, at least from a medical point of view. Eventually a resolution was adopted to the effect that the increased accommodation should be provided within the present asylum grounds.

The Queen's College, Cork.

Dr. McArdle, who had been a student of the Queen's College, Cork, had the distinction of being the first out of

all Ireland at the recent Royal University examinations for the degrees of M.B., B.Ch., and he is now Demonstrator of Anatomy in his *alma mater*.

Relative Consumption of Alcohol in England, Ireland, and Scotland.

A recent return shows that during the year 1894 the cost of drink consumed per head in England, Scotland, and Ireland was respectively £3 17*s.* 4*d.*, £3 1*s.*, and £2 2*s.* 8*d.* One of the Cork papers, commenting on the subject, says: "A significant fact about the figures is that they prove Ireland to be twice as sober a country as England and once and a half as sober as Scotland."

Oct. 29th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Sero-therapy as a Prophylactic of Tetanus.

AN instructive paper on the above subject was read at the Académie de Médecine on Oct. 15th by M. Nocard of the Veterinary School of Alfort. He began his remarks by reminding his audience that, whilst being extremely sensitive to the influence of heat, the toxine of tetanus shared with that of diphtheria the property of filtering virtually intact through porcelain. It is possible to procure some specimens of tetanus toxine capable of killing the guinea-pig at the dose of $\frac{1}{1000}$th of a cubic centimetre; and M. Nocard has succeeded in killing strong horses with an injection of only $\frac{1}{10}$ c.c. or two drops of this same toxine. Animals subject to tetanus can, however, be rendered refractory to these poisons by the inoculation of minute doses of the pure toxine or of the toxine previously heated to 65° or 70°C., or again of the toxine mixed with weak Gram's solution. The inoculations should be frequently repeated at more or less short intervals and the dose injected gradually increased. MM. Roux and Vaillard, as also M. Nocard himself, have thus succeeded in immunising certain horses who subsequently remain indifferent to a massive injection in the jugular vein of 250 to 300 c.c. of tetanus toxine—a quantity sufficient to kill 2500 uninoculated horses. The serum of these immunised animals is, moreover, endowed with prophylactic properties. This anti-tetanic serum sometimes possesses quite remarkable powers; a certain horse "vaccinated" by M. Nocard supplies a serum so active that an injection of so small a quantity as the ten-thousandth part of the body weight of a guinea-pig guarantees that animal from the effects of a dose of toxine invariably mortal to the same animal unvaccinated. But the immunity of "vaccinated" animals, although acquired immediately after the injection, is short-lived, lasting only four, five or six weeks, and being in this respect distinctly inferior to "vaccination" with attenuated microbes. A conclusive experiment to prove the uselessness of "vaccination" with anti-tetanic serum even when combined with amputation of the inoculated part was then conducted by M. Nocard. Three long-tailed sheep each received in the tail extremity a splinter impregnated with dried tetanus spores. At the first sign of tetanus the tails of two of the sheep were amputated at a point twenty centimetres above the seat of infection. One of these tail-amputated animals then received a dose of serum adequate for the protection of the normal animal, these injections being repeated every two hours. All three sheep succumbed without any difference being discernible in the symptoms. But the prophylaxis of tetanus opens up a more hopeful field. In certain districts of France tetanus is extremely common amongst horses the subjects of operations or accidents, such as castration, bites of insects, a nail-wounded hoof, tail-docking, wounds of limbs, &c. Since December, 1894, M. Nocard has supplied to veterinary surgeons anti-tetanic serum, recommending the injection of 10 c.c. behind the shoulder immediately after the receipt of a wound, operative or accidental, liable to be followed by the disease, the "vaccination" to be repeated twelve or fourteen days later. This treatment was applied to 375 animals, 327 being horses, mules, or donkeys, 47 lambs, and 1 an ox. Each received two injections at a fortnight's interval of 10 c.c. each for the large and 5 c.c. for the small beasts (sheep). In each instance the injections proved inoffensive. All the animals belonged to stables or farms where tetanus had made victims some days, weeks, or months previously; several of them had as neighbours tetanic animals, and some had been wounded at the same time and in the same manner as non-treated companions who became tetanic. Not one of these "vaccinated" animals died. M. Picard, veterinary surgeon of Sourdou, lost from tetanus in four years fifteen horses after castration or tail-docking. In 1895 not one of his operated horses has had the disease, thanks to preventive "vaccinations" in infected localities. Again, M. Coret of Aubervilliers has met with thirty or forty cases annually of tetanus in horses during the last fifteen years. During the first half of the present year he has treated fifty-four wounded horses with the serum, the lesions all enjoying an unenviable reputation for tetanic complications. Not one horse contracted the disease. During the same six months the same practitioner saw seven horses with tetanus untreated with serum. Finally, M. Nocard received a telegram on May 21st, 1895, from M. Gellez, veterinary surgeon of Carvin, asking for serum for forty-nine recently castrated lambs. Nine had already succumbed to tetanus; on May 23rd a first injection of 5 c.c. was given to the forty survivors. Two of these died on the same day, whilst the thirty-eight recovered. The castration had been practised by the shepherd on May 2nd by the ligature (of the cord) method.

Paris Hospital Statistics.

I gather from official sources that the average numbers of patients present at one given time in the Paris hospitals are as follows: General hospitals, 7900; special hospitals, 2000; children's hospitals, 1900; and Maison Dubois (paying hospital), 149. The average annual admissions are: General hospitals, 115,000; special hospitals, 32,400; children's hospitals, 13,800; and Maison Dubois, 2290. The deaths in hospital were in 1892 (the latest mortality figures refer to this year, 1892) 16,682, 12,107 occurring in the general, 1254 in the special, 2825 in the children's, 159 in the temporary, and 537 in the paying (Dubois) hospitals. The number of days spent in hospital in 1892 were: General hospitals, 3,562,113 (women, 1,238,708; children, 318,752); special hospitals, 867,034; children's hospitals, 891,766; Maison Dubois, 96,270; and temporary hospitals, 153,819. The average annual number of deaths for the whole of Paris being 55,000, it will be seen that, adding to the figure 16,682 quoted above the 1800 occurring in *hospices*, a large proportion—about one-third—take place in charitable institutions. The strain on hospital accommodation is so great that of 69,899 applications for admission made at the Bureau Central in 1893, there were 38,689 refusals due to want of beds. The work done by the Paris medical confraternity may be judged of by the following supplementary figures: Patients treated gratis at home, 112,608; of these 33,336 were paupers and 79,122 only in straitened circumstances. This number (112,608) yielded 4057 deaths. There were 15,207 women attended gratis in their confinements at home.

The New Director of the Pasteur Institute.

The new director, Émile Duclaux, was born at Aurillac in 1840, entered the École Normale Supérieure in 1859, was admitted Agrégé des Sciences Physiques in 1862, from which year until 1865 he was Prèparateur to M. Pasteur. Docteur-ès-Sciences in 1862, he has been successively Professor at the Lycée of Tours (1865–66), Professor of Chemistry at the Faculté des Sciences of Clermont (1866–73), and Professor of Physics at the Faculty of Sciences of Lyons (1873–78). Returning to Paris as Professor of Physics and Meteorology at the Institut Agronomique, he was appointed the same year (1878) Lecturer at the Faculty of Sciences of Paris, where he has been since 1888 Professor of Biological Chemistry. A long association with M. Pasteur marked him out as the fittest person for the post of sub-director, a position he has now left for the directorship. In 1894 M. Duclaux was elected a Member of the Academy of Medicine and of the Academy of Sciences. He is, besides, an *officier de la Légion d'Honneur*. M. Duclaux is Director of the "Annales de l'Institut Pasteur," each number of which contains a contribution from himself. His published works include the following:—"Études relatives à l'Absorption de l'Ammoniaque et à la Production d'Acides gras volatils pendant la Fermentation Alcoolique" (Thèse de Doctorat-ès-Sciences, 1862); "Sur la Fermentation Alcoolique" (Comptes rendus de l'Académie des Sciences, 1863; ibid., 1864); "Sur un nouveau Procédé pour l'Étude et le Dosage de l'Alcool du Vin" ("Annales de Chirurgie et de Physiologie," 1874);

"Sur la Matière colorante du Vin" (ibid., 1874); "Sur les Acides Volatils du Vin" (ibid., 1875); "Ferments et Maladies" (1882); "Premier Mémoire sur le Lait" ("Annales de l'Institut Agronomique," 1882); second memoir (ibid., 1883) on "Les Phosphates du Lait" (1894); "Sur le Rôle Protecteur des Microbes dans la Crème et les Fromages" (1894); and "Le Lait" (Études Chimiques et Microbiologiques, 1894). M. Duclaux is also the author of several memoirs on "La Sériciculture" in the "Annales de l'École Normale" and the Comptes rendus de l'Académie des Sciences (1869–78); and of sundry studies on "Le Phylloxéra" (*même recueil*, 1872–75). Dr. Roux, the new subdirector, whose name will be familiar to your readers in connexion with the new treatment of diphtheria, was born at Confolens in 1853. Beginning his medical studies at Clermont, where he worked in M. Duclaux's laboratory, he came to Paris, where he became Aide de Clinique at the Faculty of Medicine; Préparateur to M. Duclaux at the Sorbonne; and then Préparateur to M. Pasteur, whom he followed from the Rue d'Ulm to the Rue Dutot in the capacity of Chef de Service.

Oct. 29th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Professor Bardeleben's Successor.

PROFESSOR König of Göttingen, who has been elected by the faculty of Berlin University as successor to the late Professor Bardeleben is reported to have consented to his nomination, and will within a few weeks undertake the two conjoint offices of Ordinary Professor of Surgery and chief surgeon of the Charité Hospital. He might have been appointed to this chair in 1882 in succession to the late Professor von Langenbeck, but as he then declined to leave Göttingen for Berlin Professor Bergmann was elected. Professor König is one of the most renowned surgeons of Germany and is very well known in Berlin as one of the most regular attendants at the annual surgical congresses and as taking an active part in the discussions. The weight of his authority has more than once been beneficially employed in restraining the undue enthusiasm of younger men for new methods and remedies, and although his opinions in this respect have sometimes been regarded as old-fashioned it has nearly always been the case that time has proved the soundness of his judgment. His treatise on Surgery is now the best German book on the subject, Bardeleben's work not having been re-issued of late years. He is also the author of a great many articles and memoirs relating chiefly to diseases of the joints. Being an excellent operator and a very able teacher, he is certain to be heartily welcomed by the medical profession and the students of this city.

Professor Virchow's Eulogy of M. Pasteur.

The Berlin Medical Society resumed its meetings on Oct. 16th, and the renewal of the professional gatherings, together with the opening of the University lectures, has now put an end to the dull season in Berlin medical life. At the first meeting Professor Virchow, the President, read an address commemorating the deceased members, and giving special prominence to the late M. Pasteur of Paris, who since 1892 had been one of the few honorary members of this society. He described the work of the eminent French *savant*, arguing that the society's estimate of his merits ought not to be influenced by the fact that he was not a friend of Germany, and declaring his personal opinion that the Berlin Medical Society had honoured itself by electing M. Pasteur as honorary member. He suggested that M. Pasteur's obvious aversion to Germany might be accounted for by the circumstances that Strassburg, the town where he had gained his first honours, had changed owners, and that his native district had witnessed one of the most unhappy periods of the war. It is a real comfort for all who dislike the intrusion of political hostility into scientific matters that Professor Virchow seized the opportunity to point out the immortal merits of the deceased. The German lay press, and, unfortunately, a small portion of the medical press as well, have been prompted by the occasional unfriendliness of M. Pasteur's utterances to stop short of an adequate appreciation of this great man. The warmth of Professor Virchow's speech and the ardent approval of his sentiments by the greatest medical society of Berlin sufficiently show that the German medical profession realises the greatness of the loss which science all over the world has suffered by the death of M. Pasteur.

Oct. 28th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

THE SIXTH CONGRESS OF INTERNAL MEDICINE.

Dr. Baccelli's Address.

ON Oct. 22nd the *aula magna* of the University was thronged in every part as his Excellency, Dr. Guido Baccelli, opened with an inaugural discourse the Sixth Congress of Internal Medicine. After a reference to the great International Congress held in Rome at the Easter of last year as encouraging Italy to reconquer her old position in the "foremost files" of medicine, his Excellency indicated the incessant movement, which was not always progress, in the medical world, and insisted that its goal was ever the same: the perfecting of clinical medicine and State medicine, both of them having as basis general and experimental pathology, which must that day be reinstalled in the post of highest honour. "With clinical medicine," he continued, "we cure the individual. With State medicine we conserve the people. The etiology of disease, with its vast horizons and its multiform reciprocation of scientific attempts to unveil it, no longer contemplates merely the morphological indication of pathogenic micro-organisms, but feels the necessity of prosecuting unswervingly the study of toxic products—an arduous undertaking in which, from the first discoveries of Koch, the Italian school pledged itself, as by a military oath, to coöperate." Pointing out how often new and prolific truths reveal themselves at the bedside before the laboratory confirms them by experimental demonstration, his Excellency proceeded: "The scientific movement of the day surges around the cure of infective maladies, and sero-therapy holds the place of honour. Behring's therapeutic conception was justified by events, but criticism, in its severer mood, clipped the wings of a too sanguine expectation. Sero-therapy in diphtheria constitutes to-day the method that numbers most successes; nevertheless, it leaves something to be desired, some material for new studies, so that we may reap the harvest it is capable of yielding. To-day one of our colleagues proposes sero-therapy even in tuberculosis. But a truce, gentlemen, to *a priori* judgments, possibly inspired by sentiments inadmissible in the cool contemplation of facts. In the impartial and severe response we shall have to pronounce before the scientific world let us not forget the famous motto of the 'Accademia del Cimento'—'Provando e riprovando' (by testing and retesting)." From this his Excellency passed to another prominent theme before the Congress on "the metabolism whose activity in the human organism is at once its conservation and its defence. Of late years, even in other fields of pathology, Italian work, especially in the nervous system, earned fame for its authors and honour for their country. Once and again I have told you that, while respecting all, we should be jealous of our own achievement and not allow the scientific world to hold as of non-Italian origin those truths which had their birth-place in Italy. Some years ago one of our number had to show to Nannyn that what he announced as to the murmurs of the impaired heart had already been taught in an Italian clinique, and to-day we must adopt the same attitude towards some late French doctrine appropriating to itself the discovery of the lines of propagation of mitral murmurs (especially in insufficiency)—a 'discovery' which for thirty years had been a *locus communis* in Italian clinical teaching." Reverting, however, from this vindication of national merit to the brotherhood of science, his Excellency discoursed on the advantages of periodical meetings like the Congress which had brought them together, and concluded, amid loud applause, with the aspiration that *pari passu* with Italy's political resurrection would proceed her rehabilitation in the world of science.

Sero-therapy.

Dr. Pio Foà, Professor of Pathological Anatomy and Bacteriology in the University of Turin, thereupon delivered his report on Sero-therapy. I may summarise his conclusions as follows:—Sero-therapy is the result of patient, systematic

research in the laboratory, and is founded on the reaction of a receptive animal organism to an infective agent introduced, like vaccine, by various methods, or on the reaction of the organism to the toxic products of the agent itself. Organisms endowed with natural resistance do not ordinarily react with the production of immunising and curative substances; the most effective reaction is given by the most receptive organisms. Hitherto the soundest results have been obtained by toxic infections, still the latest researches point to obtaining similar effects in septic infections. The notion that every infection is reduced to a simple poisoning and every reaction to the production of an antidote, is, perhaps, too absolute. We must distinguish the specific poisons (diphtheria, tetanus) from those which are not, while the reaction of the organism will possibly be excited either against the poison or against the protoplasm itself of the bacterium. Sero-therapy in diphtheria issues triumphant from the test of practice, and statistics establish for it a distinct diminution of mortality. Sero-therapy in tetanus has proved less efficacious in acute cases. The tetanic manifestations in such cases would indicate deep organic lesions already completed, against which sero-therapy would be unavailing. Still, sero-therapy is an excellent prophylactic. Sero-therapy in typhoid fever and cholera has yet to be tried. The main difficulty, perhaps, depends on the notable difference subsisting between experimental results and the natural course of infections in man. Important experimental studies have been made (and their results recently published in THE LANCET [1]) by Professor Tizzoni and Dr. Centanni on Sero-therapy in Rabies; but we await its more extended application to the human subject. The researches of Viquerat and Marmoreck give promise of the success of sero-therapy in the surgical field through infections by (for example) the streptococcus pyogenes. Dr. Foà's latest studies seem to solve the problem of sero-therapy in the diplococcic infection of the rabbit; he has yet to investigate the problem in animals of greater bulk admitting of the application of the results to man. Sero-therapy (he concluded) ought to be no bar to the development of prophylaxis. Both aim at preventing maladies; and sero-therapy, where it proves efficacious in preventive immunisation, will itself become a prophylactic measure. Dr. Maragliano, Professor of Clinical Medicine in the Genoa school, then took up the subject where Dr. Foà left off, and his views (already to some extent placed before the British Medical Association at its last meeting) may thus be epitomised):—The therapeutic serums, to develop their proper action, require the effective coöperation of the affected organisms. The value of sero-therapy can be determined only by clinical observation. Sero-therapy can manifest its peculiar action as well in acute as in chronic affections. The therapeutic serums hitherto employed in European practice are absolutely innocuous. Sero-therapy, in its clinical applications, has up to the present yielded indeterminable results in the streptococcic and typhoid infections; doubtful results in tetanus; promising results in pneumonia, which only requires a methodical clinical employment of it; positive results in tuberculosis, where it awaits nothing more than the confirmation of a case-list, which already bids fair to be an extended one; and impregnable and truly triumphant results in diphtheria.

Oct. 28th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Cholera Intelligence.

DURING the last week there have been 18 new cases at Damietta and in a village adjoining it, many of them young children, and mostly mild cases. However 7 patients have died during the week, showing that the disease must not be trifled with, though it does not possess any of the alarming symptoms usually seen in the East when cholera first breaks out. At Mansourah some little excitement was caused by a man being found dead on a barge which had just arrived from Menzaleh. As Dr. Kaufmann found in this case the comma bacillus the clothes were burnt, the barge disinfected, and the man's companions were isolated in a tent in a field outside the town, where, after five days, they are all quite well. As this death showed that the disease probably existed at Menzaleh a native inspector was at once sent to seek out any sick there and to start a hospital. His first report now states that he has found 18 sick at Menzaleh and two neighbouring villages, besides which 5 cases have died. Since then Dr. Keatinge has been sent in a steamer to patrol the canal and the villages between Mansourah and Menzaleh, and he already reports that he has discovered 4 suspicious cases at a tiny village called El Kordi on this canal, about one-third of the way from Menzaleh towards Mansourah. He has left a medical man with these 4 cases and all necessary equipment. Dr. Kaufmann has found some cases of cholera in isolated villages of Lake Menzaleh. The whole of the cholera in Egypt is at present confined to two foci, Damietta and Menzaleh, both in free communication with each other, and both considerably behind the rest of Egypt in sanitary progress. At both places there is an abundant supply of good water coming from the Nile below Cairo, and the English irrigation engineer is himself superintending the supply. Of course there has been the usual demand for sanitary cordons, based on the most selfish and illogical reasons, but I glad to say that the Egyptian Government has accepted the advice of its English medical men and has decided, instead of cordons, to establish inspection stations for the examination of those coming from infected districts. In at least two instances temporary blocks on the railway and on a canal were caused by an attempt at a limited cordon, but these have now been removed as it was conclusively shown that their only effect was to impede bales of cotton and commerce generally, while no restriction could be placed on people using other routes, of which in this roadless country there are very many.

Need of Telegraphic Communication.

It is distinctly inconvenient that there is no telegraph between Mansourah and Menzaleh. It has been recommended to lay down a temporary wire, and in the meantime mounted orderlies are despatched every day with letters. There is no panic in the country, and people on the whole are behaving very well. Based on the experience of sixty years, there is a very widespread belief that cholera cannot seriously spread over the country at this time of year.

Mansourah, Oct. 23rd.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Inspection of "Way Passengers."

FOR the purpose of more effectually protecting the country against an invasion of cholera from Japan the United States Treasury Department established an inspection of passengers on the Pacific Mail Steamship Company's vessels returning from infected ports in that country. This inspection was not limited to passengers bound to the United States, but included also passengers who intended to disembark at Yokohama, or, in other words, "way passengers." The company objected to the action of the Consul at Kobe, who ordered this inspection, and appealed to the Secretary of the Treasury. The decision of the Secretary was that, "for the protection of the through passengers and the people of the country, it is as important that the way passengers, or those who are to stop at the intermediate ports, should be inspected. Otherwise the passengers bound for the United States would always be in danger of contagious and infectious diseases from such uninspected passengers. If persons who take local passage from Kobe to Yokohama, for instance, are exempt from inspection under the law, then for the same reason a shipload of passengers could without inspection be brought from Kobe or some other eastern port to a Canadian port on a vessel coming to the United States." The request to discontinue the inspection was therefore refused.

Results of Municipal Sanitation.

When the Health Department of New York was organised on a scientific basis in 1886 the death-rate was 35·04 per 1000. In 1868 it had fallen to 29·31. In twenty years more the rate was further reduced to 26·60. In 1893 the rate was 23·52, and in 1894 the lowest record was reached since 1814—viz., 21·05 per 1000 inhabitants. The decrease in the death-rate for twenty-five years represents a saving of over

[1] THE LANCET, Sept. 14th, 21st, and 28th, 1895.

3500 lives annually and of over 80,000 lives during the quarter of a century.

The Epidemic of Cholera in Japan.

The medical officer in the United States Consulate at Yokohama, Japan, reports, Sept. 16th, that cholera has now existed in Japan for some five months, that it has been very widely disseminated, chiefly by the troops and coolies returning from the seat of the late war, and is now, or has recently been, present in every province of the empire. There are many centres of infection, so that the total number of disease foci is very great. The present epidemic has a mortality higher than the average, the death-rate for the whole country having, so far, ranged between 65 and 75 per cent., while in certain districts nearly every case has proved fatal. The total number of reported cases is 42,708, and the deaths 28,513.

Life in the Steerage.

The arrangements for steerage passengers on one of the best ocean steamers, the *Campania*, are as follows. The steerage quarters, which are situated on the lower deck, are divided into seven different sleeping apartments for the accommodation of some 700 or 800 passengers. There are separate apartments for the single men, single women, and married couples. The five apartments for the use of the two first-named classes are equipped with from 60 to 110 berths, measuring 6½ ft. by 2½ ft., which are built close together and arranged in tiers of two in the centre of each steerage. These berths are constructed of adjustable galvanised iron piping, thus preventing the accumulation of dirt so common in the case of the old wooden berths. Each passenger is provided with a clean straw mattress and a heavy rough blanket. Each time the steamer reaches port the old mattresses are burned and new ones taken on board, while the blankets are thoroughly washed and cleansed before the return voyage. The quarters for married people are aft, on the lower deck, in a "pocket" on either side of the vessel. Each of these pockets is divided into some twenty state rooms, each containing from two to six berths, which are furnished in the way already described. All the forward steerages extend across the entire width of the deck, are approachable by two entrances, and are well ventilated. The "pockets," which are confined to either the port or starboard side of the vessel, are less roomy and have only one entrance to each. The arrangements for ventilation in the steerage are exceptionally good on this ship. Besides the ventilation obtained from the hatchways and from the large flue ventilators a new ventilating attachment has been placed upon each porthole. It is generally necessary to close the portholes if the voyage is at all rough. This is done by fastening a heavy inch-and-a-half plate-glass cap over the hole, which lets in the light. Just outside the glass cap on the top of the port-hole are several small openings for ventilation. Each one of these openings is provided with a cork so placed on the inside as to allow the air to pass in, but should a heavy wave strike the porthole the force of the breaker drives the cork to its place, closing the openings for ventilation until the wave retreats. The passengers eat their three meals a day sitting on long rows of benches arranged before narrow shelves fastened to the sides of the vessel in the sleeping apartments. Each emigrant is provided on boarding the ship with a plate of heavy crockery, a knife, fork, spoon, and tin cup. These articles each individual is supposed to care for and keep clean during the voyage. After each meal a big pan of water is placed upon the floor in each of the steerages as a common cleansing place for all the dishes. As a matter of fact, however, less than one-third of the passengers ever take the trouble to wash their dishes. Two light and airy hospitals, containing twelve beds each, are situated on the main deck for the use of the sick. The steerage passenger medical officer attends to all cases of illness among the passengers. He is required to punch the inspection card of each emigrant daily after each examination, which is a guarantee to the inspection officers at the Immigration Bureau that the passenger has had no contagious disease. On a certain day during the voyage all the steerage passengers are mustered on deck by order of the ship's medical officer to pass the vaccination examination. If they are found to have been properly vaccinated they receive a certificate to that effect; if not, they are put on one side for subsequent treatment.

Oct. 16th

Obituary.

LAUNCELOT ANDREWS, M.D., L.R.C.P. LOND., M.R.C.S. ENG., D.P.H. CANTAB.

THE announcement of the death of Dr. L. Andrews, which occurred on Oct. 29th at 22, Cheyne-gardens, Chelsea, will, we know, be received with the deepest regret by all who knew him. Launcelot Andrews was the eldest son of the Rev. W. R. Andrews, rector of Teffont Ewyas, Wilts. He was educated at Haileybury and St. Bartholomew's Hospital, where he held the appointments of house physician, house surgeon, ophthalmic house surgeon, and assistant electrician. Some five years ago he started practice in Chelsea, and for so young a man succeeded remarkably well. His death was due to a very rapidly growing malignant tumour of the abdomen. He was most popular among all with whom he had to do at the hospital. A hard worker in everything he did, always cheerful and apparently never tired, his untimely end—he was only thirty-one—will be a source of sorrow to his many friends as well as to his patients. He leaves a widow and one child.

ARTHUR MEREDITH WHITEHEAD, M.B., C.M. ABERD.

WE regret to announce the death of a well-known and highly respected colonial practitioner, Dr. Whitehead of Petone, Wellington, New Zealand, who first arrived in the colony about nine years ago and passed away on Aug. 30th at a comparatively early age. He was the son of a Nottingham alderman and was born in 1861. Having made up his mind to follow the medical profession, he became a student at the London Hospital and also attended classes at Aberdeen University, where he graduated in 1883. After a short experience of practice in Nottingham he made several voyages as surgeon of a passenger steamer plying to China, and in 1886 settled in Petone, which was thenceforward to be his home, although he made a long visit to England in 1894, returning to the colony in the beginning of the present year. The funeral was conducted with military honours, in presence of a great assemblage, including Government officials, military and naval officers, and representatives of various public bodies. Dr. Whitehead has left a widow and a young family.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Litthauer, "Physicus" of the Fifth Municipal District of Berlin, and a well-known local authority on sanitary matters.—Dr. Schütte, formerly Director of the Elizabeth Children's Hospital, Berlin.

DIPHTHERIA IN LONDON.—The returns for London in the matter of fatal diphtheria last week were, it is true, somewhat better than in the week immediately preceding, wherein 76 deaths from that disease had been registered. But even last week the registered deaths numbered 61, or 22 in excess of the corrected decennial average of the similar week of the years 1885–94. The malady is widely distributed over the metropolis, finding place in districts stretching from Greenwich, southward and eastward, to Enfield on the extreme north of the "outer ring." Of the 61 deaths, 7 belonged to St. Pancras, and 6 each to Islington, Poplar, and Greenwich sanitary areas. The cases finding their way into hospital are far from being the whole of the attacks arising from week to week, and much dissatisfaction is being felt by sanitary authorities at the small percentage of removals. The admissions last week were 115 in number, against 90, 102, and 115 in the three preceding weeks. The patients remaining under treatment for this disease on Saturday last numbered 675. In Greater London the deaths for three weeks in succession have been identical—namely, 27; and of this total last week there were 9 in West Ham, 7 in Edmonton, and 3 in Willesden registration areas. In the Edmonton district there has been a state of panic on account of the disastrous outbreak of the disease in the Waltham parishes, the sanitary condition of the places affected being seriously called in question.

Medical News.

UNIVERSITY OF ABERDEEN. — The following candidates received the degrees of Bachelor of Medicine and Master in Surgery on Oct. 26th:—

Affleck, James, Scotland.
Auden, Arnold William Montford, B.A., England.
Avatullah, India.
Bell, William Jarvis, America.
Bray, Ernest James, Australia.
Bruce, John, Scotland.
Campbell, Robert Brown, Scotland.
Carmichael, Edward William Scott, Scotland.
Coates, John Mandall, Scotland.
Crawford, James Mansfield, Ireland.
Crerar, Donald, Scotland.
Dewar, David Fitchie, England.
Dixon, James Herbert, England.
Elliott, George Christopher, England.
Evans, Alfred Thomas, Wales.
Evans, David, Wales.
Evans, William, England.
Fernandes, Ramsden Walker Luis, England.
Fitzgerald, William, New Zealand.
Fleming, Archibald Nicol, Scotland.
Fothergill, George Algernon, England.
Gibson, Francis Maitland, B.Sc., Scotland.
Guthrie, Roger Christian Lingard, Scotland.
Hewison, John James, M.A., Scotland.
Hewison, William, Scotland.
Hirst, John, England.
Johnson, Walter, England.
Lall, Chaman Chandu, India.
Lamb, James Henry, Scotland.
Leighton, Gerald Rowley, England.
Livingston, George Robert, Scotland.
Love, Alexander Mayne, Ireland.
M'Rae, George Douglas, Scotland.
Martin, James Sackville, Ireland.
Massey, James, Ireland.
Masson, George Henry, Trinidad.
Moore, William Andrew Wylie, Ireland.
Munn, Patrick James, Scotland.
Ogilvy, Stewart Grant, Scotland.
Park, Alexander John, Australia.
Pentland-Smith, Archibald Lumsdaine, M.A., B.Sc., Scotland.
Purves, Robert Black, Scotland.
Roberts, John Howard Digby, India.
Rodger, Robert Stuart, England.
Roe, Robert Lloyd, Ireland.
Roger, David, Scotland.
Ross, Alfred Peter, England.
Saldanha, Luis Cupertino, India.
Scott, James George Campbell, Scotland.
Sibbald, Bernard Ian Graham, Scotland.
Smith, Sydney Harold, England.
Theobalds, Arthur John Arundel, England.
Thompson, Charles Gurney, England.
Twidale, Frederic William, India.
Vos, Jacob William de, Cape Colony.
Williams, Lewis Arthur, England.
Wills, Frederick Telemachus, British Guiana.
Wilson, William Henry, England.

FOREIGN UNIVERSITY INTELLIGENCE.—*Marburg:* Dr. Joseph Disse of Halle has been appointed Professor of Anatomy.—*Pisa:* Dr. Minati, Professor of Midwifery and Gynæcology, has retired.—*Rome:* Dr. Galassi, Professor of Special Pathology, has retired.

BOURNEMOUTH MEDICAL SOCIETY.—The annual meeting was held on Oct. 25th at the Hotel Mount Doré, when the committee's annual report and the balance-sheet were submitted. Mr. C. H. W. Parkinson, the retiring President, gave up the chair in favour of Mr. D. C. Embleton, President-elect. The following officers were elected for the ensuing year: Vice-President, Mr. A. G. S. Mahomed; Treasurer, Dr. Kinsey-Morgan; Secretary, Dr. H. G. Lys; Librarian, Dr. S. L. Clift; Committee, Mr. A. C. Kemble (Poole), Dr. W. H. L. Marriner, Dr. C. D. Muspratt, and Dr. F. W. Ramsay. The annual dinner was held after the meeting, at which twenty-three members and seven guests were present.

A NEW WORKHOUSE INFIRMARY.—An entirely new infirmary, a mortuary of noteworthy completeness, and a disinfecting chamber are approaching completion at the Guildford workhouse. The former consists of two blocks in duplicate united by the administrative buildings. Each block is 210 ft. long and from 24 ft. to 64 ft. wide, and consists of three storeys. On the ground floor are two separation wards of four beds each, a long ward for the aged and infirm with twenty beds, and two wards containing altogether seventeen beds for children and special patients; a day-room, offices, and exercising yard being attached. The separation wards only rise one storey; in other respects the first floor of each block follows the ground plan, while above are the nurses' day and night quarters. The staircases are of concrete, and heat is supplied by hot-air stoves. The administrative buildings include a large kitchen, surgery, and attendants' room, but the general cooking will be undertaken at the workhouse, with which a corridor connects the infirmary. Lying-in wards are over the administrative block. An "observation block" for suspicious cases—two wards and attendants' rooms—is built at a short distance. The mortuary consists of a viewing-lobby separated from the dead-house by a glass partition, as in the Morgue, a post-mortem room with operating-tables, and a hearse-house. A disinfecting chamber has also been built to provide the means of fumigating clothing by gas. The total accommodation of the new buildings is some 160 beds.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen, having passed the necessary examination for registered practitioners, have been admitted Licentiates of the College:—Edward Barker Barber, L.S.A. Lond., and Henry Ernest Watts, L.S.A. Lond.

ROYAL BRITISH NURSES' ASSOCIATION. — The first sessional lecture of the season will be given at 17, Old Cavendish-street, W., on Friday, Nov. 22nd, at 8 P.M., by Dr. Louis H. Parkes, medical officer of health, Chelsea, on the Importance of breathing Fresh Air.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—On Monday, Oct. 28th, in the theatre of the school, Dr. Howship Dickinson distributed the certificates of honour given to students who had gained scholarships, exhibitions, and prizes during the year. The recipients were: Mr. Walwyn Thomas, £100 Exhibitioner and Treasurer's Prizeman; Mr. Sidney Smith and Mr. Frank Morley, Brackenbury Prizemen in Medicine and Surgery respectively; Mr. E. T. Fison, Special Certificate of Honour in Medicine; Mr. R. A. Cooper, Brodie Prizeman; Mr. H. S. Barwell, Henry Charles Johnson and Proficiency Prizeman; Mr. R. E. Drake-Brockman, Brodie Prizeman; Mr. C. R. Keyser, Sir Charles Clarke's Prizeman; Mr. T. M. Neatby, Proficiency Prizeman; Messrs. H. S. Pendlebury, H. G. Deller, and Howell Evans, Entrance Scholars in Science; and Messrs. T. C. English, H. A. Chaplin, L. F. Cope, and Lawrence Jones, Entrance Scholars in Arts. Addressing the students at the close of the ceremony Dr. Dickinson warned them against the danger of becoming one-sided—a danger to be avoided by a legitimate degree of indulgence of an Englishman's natural taste for sport and by the cultivation of the great masters of English literature. For the works of Milton, Addison, and Gibbon he claimed special attention.

THE DIFFUSION OF SMALL-POX. — There was some slight increase of small-pox in London last week as compared with the week preceding. The totals of removals had in the three weeks ended Oct. 19th been respectively 17, 9, and 7, but last week they were 14 in number. There was one registered death, that of an unvaccinated infant of six months of age removed from Chelsea to the hospital ship *Atlas*. According to returns from the Metropolitan Asylums Board and from Highgate Small-pox Hospital the patients remaining under treatment for small-pox numbered on Saturday last 114, a further slight decline on the total of 119 in the preceding week. The cases occuring in the week ended last Saturday were very unevenly distributed over the several days; on Friday, for example, no attack was reported. There is still an outcry respecting the position of the hospital ships at Long Reach, their proximity to populous districts being considered a distinct danger to the community, and much has been said locally as to the desirability of the removal of the vessels from their present moorings. The General Purposes Committee of the Metropolitan Asylums Board have suggested that plans be prepared for temporary small-pox buildings at Joyce Green farm, Dartford, and the Small-pox Hospitals Committee have advised the appropriating of the whole or part of Gore Farm Small-pox Hospital at Darenth for convalescent fever patients. In the provinces some small stir has been caused at Kington by reason of the charge of £3 10*s.* on account of the damage done to a cab in which a doubtful case of small-pox was removed to the workhouse, no proper ambulance and no proper hospital having apparently been provided. Both Manchester and Salford in recent weeks report freedom from small-pox cases, and from Oldham we learn that only a single, and that non-fatal, attack of small-pox was heard of in the fortnight ended Oct. 19th. The locality of Wigan seems to have suffered somewhat recently, but good use is being made of the local hospital arrangements. Small-pox is not extinct in Dublin, but the subject of the isolation provision to be made for that disease is just now receiving an amount of attention far beyond that given to the actual presence of the malady itself. Much comment has been passed on the workhouse shed in which convalescing patients have been housed at Kilmainham, and loud outcry has been raised against the continuance of small-pox hospitals in the midst of the city. The question has been pronounced upon by the medical staff of the Irish Local Government Board in a manner to cause the advocates of city small-pox isolation provision to hesitate before committing the city to further danger from the treatment of small-pox near aggregations of population.

THE SANITARY INSPECTORS' ASSOCIATION.—The first ordinary monthly meeting of the Session 1895–96 will be held to-day, Saturday, Nov. 2nd, 1895, at 6 P.M., at Carpenters' Hall, Throgmorton-avenue, E.C., when the annual address of the chairman will be delivered by Mr. Henry Thomas, chief sanitary inspector of Bermondsey, and applications for election to membership will be considered, after which there will be the usual members' conference.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—A meeting of the South-Western Division was held at Wonford House, Exeter, on Oct. 15th. Dr. Morton, Dr. Rutherford, Dr. McLean, and Mr. Laslett were elected members of the association. Dr. Deas opened a discussion on the Uses and Limitation of Mechanical Restraint as a Means of Treatment. Dr. Deas's able and succinct remarks were followed by a prolonged and interesting discussion. Dr. Morton read notes on Three Cases of Spontaneous Gangrene. It was agreed that Dr. Macdonald's paper on the Nursing Staff should be the subject for discussion at the next meeting. The spring meeting was fixed for Tuesday, April 14th, 1896. The members afterwards dined at Pople's New London Hotel.

INFIRMARY MEDICAL SUPERINTENDENTS' SOCIETY.—The first meeting of the session was held on Oct. 26th at St. Marylebone Infirmary, the President, Mr. J. R. Lunn, F.R.C.S. Edin., being in the chair. There were several visitors, amongst whom were Dr. Colcott Fox, Mr. Geo. Stoker, and Dr. M. H. Spencer. Dr. Colcott Fox delivered a short address on Ringworm, explaining the varieties, the differences of their growth, and the treatment to be adopted. He deprecated the constantly recurring craze for some new parasiticide, which invariably ended in disappointment, chiefly because the proper method of application was not intelligently carried out. He then briefly described the irritant treatment, recommending the use of an ointment containing the red oxide of mercury.—Dr. F. S. Toogood (Lewisham Infirmary) pointed out the danger of producing permanent baldness by over-irritation.—Mr. Geo. Stoker described the method, and exhibited his apparatus for the treatment of ulcers of the leg by the oxygen bath.—Mr. J. R. Lunn exhibited cases of pemphigus exfoliata, pemphigus rash produced by the internal administration of iodide of potash, functional chorea, ankylosis of lower jaw relieved by operation, tabetic feet, congenital pemphigus, and Charcot's disease of the shoulder-joint. Mr. Lunn also showed a card specimen of aneurysm of the thyroid axis cured by operation.

LITERARY INTELLIGENCE.—Mr. W. B. Saunders of Philadelphia announces the early issue of the "American Year-book of Medicine and Surgery," edited by Dr. George M. Gould, the author of the latest excellent "Dictionary of Medicine," whose experience peculiarly qualifies him for the preparation of this work, not only to review the contributions to American journals, but also the methods and discoveries reported in the leading medical journals of Europe, thus enlarging the survey and making the work characteristically international. These reviews will not simply be a series of abstracts, nor will they be retrospective of "news" one or two years old, but the treatment presented will include only what is new as regards the year in question. The work will be profusely illustrated.—"Clinical Illustrations of the Diseases of the Fallopian Tubes and of Tubal Gestation," by Charles J. Cullingworth, M.D. Durh., F.R.C.P. Lond., is the title of a work which will shortly be issued by Messrs. Rivington, Percival, and Co. The work, which consists of a series of drawings with descriptive text and histories of the cases, is designed to assist medical practitioners who have few opportunities of seeing the diseased parts after removal from the body, but within whose experience the diseases often come. The coloured drawings have been made while the specimens were still fresh. A feature of the work will be the frontispiece, in which an attempt has been made to depict the Fallopian tubes as they are found in the living subject as distinct from drawings made from dissecting-room specimens pinned out for display without regard to the natural relations of the various adjacent parts.—"Haydn's Dictionary of Dates," the most universal book of reference in a moderate compass in the English language, and a work indispensable to literary men, is, we are glad to note, about to pass through a new edition brought down to the autumn of 1895. This, the twenty-first, edition will contain some 1230 pages, 12,000 articles, and 140,000 dates and facts. Messrs. Ward, Lock, and Bowden, Limited, are the publishers.

THE Royal National Pension Fund for Nurses received £22,500 last week.

MR. W. H. JALLAND, M.R.C.S., of York, has accepted the office of Sheriff of the city for the ensuing year.

AN ASYLUM FOR CARDIFF.—A conference of delegates from the Glamorgan County Council and the borough councils of Cardiff and Swansea was held at Cardiff last week in reference to the Bridgend Asylum. It was stated that 400 out of the 1000 patients now under treatment were from Cardiff, and it was decided that Cardiff should separate from the union of the asylum authorities and construct an asylum of its own.

A PUBLIC ABATTOIR FOR BRISTOL.—At the meeting of the Bristol Sanitary Committee held last week a report was presented by the medical officer of health (Dr. D. S. Davies) and the assistant medical officer (Dr. Dowson) upon Slaughter-houses. It stated that there are eighty-five slaughter-houses in Bristol; forty-four are unfit for that purpose owing to structural derangements, unsuitability of locality, and neglect of common sanitary precautions, twenty-one are passable, and only twenty can be classed as fit; only one complies with the recommended rule of the Local Government Board that the abattoir should be 100 yards from a dwelling-house. There is only one meat inspector in Bristol, and he has to look after the fruit and vegetables as well. He cannot do all this thoroughly, and so there are facilities for the disposal of unsound meat which are practically beyond the control of the inspector. Dr. Davies mentioned that Liverpool, with an abattoir, had six meat inspectors. Financially the abattoir would be a benefit, as the majority of these in other large towns pay from 4 to 6 per cent. The report concluded with a strong recommendation for the erection of a public slaughter-house. The chairman of the sanitary committee proposed, and it was carried, that it was desirable to provide a public slaughter-house, and that the engineer be requested to give particulars of the working, cost, revenue, &c. of such structures, and to suggest a suitable site. The slaughter-houses in Bristol are evidently in a most unsatisfactory state, and it is gratifying to see that the sanitary committee are anxious to carry out the suggestion of their medical officer of health for the erection of a public abattoir. As Bristol is a large meat-distributing centre it is impossible for one inspector to do his work thoroughly. This can easily be remedied by the employment of additional inspectors.

ROYAL ALBERT ASYLUM.—The annual meeting of this institution for idiots and imbeciles of the northern counties was held on the 25th ult. at Southport, the chair being occupied by the mayor, Alderman Dr. Wood. The report stated that there were 542 patients in the asylum—370 boys and 172 girls. The great majority came from Lancashire and Yorkshire. During the year there had been 64 admissions, 56 discharges, and 17 deaths. There was great difficulty in making it understood that it was "an educational establishment, and that it would be a sheer waste of resources, with the full and varied staff of teachers and trade instructors, to receive hopeless cases of idiocy." In moving the adoption of the report Sir John Hibbert said there were 5000 weak-minded persons in the northern counties under twenty years of age, of whom one-half were capable of being trained in such an institution as theirs. They had accommodation for 600 patients, and with an increase in the subscriptions they could fill up the vacancies. Those admitted were put through a course of seven years' training, and there were few cases in which great improvement did not take place. Of the 56 discharges 20 were much improved, 24 materially, 8 slightly, and only 4 not improved. Many discharged patients earned their own living (one was receiving 23*s.* a week at the trade he learned at the asylum), and during the year two enlisted in the army, of whom good accounts had been received. He contrasted the scanty provision made in this country for these cases compared with what was done in America and in many European countries. In Norway and Sweden there are, in addition to several special institutions, classes in connexion with the public elementary schools for feeble-minded pupils; and during the past year the London and the Leicester School Boards had made special provision for these cases, but Sir John Hibbert did not know that this was done in any of the northern counties.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

AMESS, JAS., M.B., Ch.B. Melb., has been appointed a Public Vaccinator for Richmond, Victoria, Australia.

BATEMAN, C. E. G., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Workhouse and the Walsingham Sanitary District of the Walsingham Union.

BOULTON, A. E., M.R.C.S., has been appointed Medical Officer of Health for the Horncastle Rural Sanitary District, vice H. George.

CARMICHAEL, W. J., M.B., C.M. Aberd., has been appointed Surgeon and Agent to the Coastguard at Colliston and Medical Officer for the Parish of Slains, vice Dr. Jamieson, resigned.

CHARLES, RHYS P., has been appointed Analyst for Neath.

DAVENPORT, H. D., L.R.C.S. Irel., has been appointed a Public Vaccinator for the district of Huntsville, New Zealand.

EDWARDS, NORMAN FOX, of Bowdon, Cheshire, has been appointed House Physician to the Swansea Hospital.

EVANS, ARTHUR HENRY, has been appointed Resident Obstetric Assistant to the Westminster Hospital.

FLEMYNG, G. G., M.D., B.S. Dubl., has been appointed Medical Officer for the Downham Sanitary District of the Ely Union.

GARSTANG, THOS. W. H., M.R.C.S., has been appointed Medical Officer of Health to the Bucklow Rural District Council (late Altrincham Rural Sanitary Authority).

GIBBS, F. E., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Eighth Sanitary District of the Wycombe Union.

GLEDDEN, A. M., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer to the Miners' Association at Minmi, New South Wales.

GOODE, W. H., M.D., Ch.M. Dubl., L.K.Q.C.P. Irel., has been appointed an Official Visitor to the Hospitals for the Insane at Gladesville and Callan Park, New South Wales.

GORDON, W., M.A., M.D., B.C. Cantab., M.R.C.P., has been appointed Physician to the West of England Eye Infirmary, Exeter.

HOOD, A. J., M.B., Ch.M. Glasg., has been appointed Honorary Physician to the Sydney Hospital, New South Wales, vice Huxtable, deceased.

HOUMAN, ANDREW, M.R.C.S. Eng., has been appointed Health Officer for Williamstown, Victoria, Australia, vice Johnston, resigned.

JAMES, PHILIP, F.R.C.S., has been appointed Surgeon to the Wellington Hospital, New Zealand.

JOLLY, R. W., M.R.C.S., has been appointed Medical Officer of Health for the City of Peterborough, vice W. E. Paley.

JOYCE, A. F., M.B., Ch.B. Melb., has been appointed Public Vaccinator for East Brighton, Victoria, Australia.

KIDD, A. E., M.B., C.M. Edin., has been appointed Resident Medical Officer in the Dundee Hospital for the Sick Poor.

LITTLEJOHN, T. H., M.B., C.M. and F.R.C.S. Edin., D.P.H., has been appointed Medical Officer for Scarborough.

MORGAN, H. DE R., M.A. Oxon., M.R.C.S., L.R.C.P. Lond., has been reappointed Medical Officer of Health for the Cockington Urban District Council.

MORLEY, H. W., M.R.C.S., L.R.C.P., formerly Assistant House Surgeon, has been appointed House Surgeon to the Royal Portsmouth Hospital.

MUTCH, F. R., M.D. and C.M. Aberd., has been appointed Surgeon to the Samaritan Hospital for Women, Nottingham, vice E. B. Truman, resigned.

NAYLOR, A. G. E., L.R.C.P., L.R.C.S. Edin., has been appointed Health Officer for Dunmunkle Shire, North Riding, Victoria, Australia.

PATTINSON, H. A., L.R.C.P. Irel., M.R.C.S., has been appointed Medical Officer of Health for the Seaton Urban Sanitary District.

POWELL, T. P., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Deputy District Vaccination Officer by the Retford Board of Guardians.

SHEWEN, ALFRED, M.D. Lond., M.R.C.S., has been appointed an Official Visitor to the Hospital for the Insane at Parramatta, and the Lincensed House for the Insane at Cook's River, New South Wales, vice Huxtable, deceased.

SWALLOW, F. McD., L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer of Health for the Penistone Rural Sanitary District.

THROWER, M. R., L.R.C.P., L.R.C.S. Edin., has been appointed a Public Vaccinator in South Australia.

TIBBETTS, T. M., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Medical Officer of Health by the Quarry Bank Urban Council, vice W. H. Thompson.

WEST, WALDEMAR S., M.A., M.B., B.C. Camb., has been appointed Resident Medical Officer to the Royal Hospital for Diseases of the Chest, City-road, London, E.C.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BRISTOL HOSPITAL FOR SICK CHILDREN AND WOMEN.—House Surgeon. Salary £100 per annum, with rooms and attendance (not board).

CATERHAM ASYLUM (under the Metropolitan Asylums Board).—Second Assistant Medical Officer. Salary £120 per annum, rising £10 annually to £150, with board, furnished apartments, attendance, and washing. Applications to the Clerk to the Board, Chief Offices, Norfolk-street, London, W.C.

DENBIGHSHIRE INFIRMARY, Denbigh.—House Surgeon. Salary £80 per annum, with board, washing, and residence in the house.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART AND PARALYSIS, 32, Soho-square, London.—Resident Medical Officer for six months. Board, residence, laundry, and an honorarium of 10 guineas.

ROYAL PORTSMOUTH HOSPITAL.—Assistant House Surgeon, for six months. Board and residence provided, and an honorarium of 15 guineas.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House Surgeon for six months. A gratuity of £10 will be given if found satisfactory.

ST. MARY'S HOSPITAL FOR SICK CHILDREN AND MEDICAL MISSION DISPENSARY, Plaistow, London, E.—Resident Medical Officer. Salary £80, with board, washing, and attendance. Applications to Chairman of Committee, Rev. T. Given-Wilson, Plaistow.

SUNDERLAND INFIRMARY.—House Physician. Salary £80, rising £10 annually to £100, with board and residence.

TOWNSHIP OF TOXTETH PARK.—Junior Assistant Resident Medical Officer for the Workhouse Infirmary. Salary £75 per annum, with board, washing and apartments. Applications to the Clerk to the Guardians, 15, High Park-street, Liverpool.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY, Whitehaven.—House Surgeon. Salary £120 per annum, and £30 per annum for Dispensing, with furnished apartments and attendance.

Births, Marriages, and Deaths.

BIRTHS.

CARVELL.—On Oct. 27th, at Grove-villas, Wanstead, the wife of J. Maclean Carvell, L.S.A., of a son.

CLOSE.—On Oct. 18th, at Strafford House, Boston, the wife of Henry A. Close, Deputy-Inspector-General R.N. (retired), of a daughter.

EDWARDS.—On Oct. 27th, at 55, Harley-street, W., the wife of T. Swinford Edwards, F.R.C.S., of a daughter.

HARRIS.—On Oct. 29th, the wife of John Russell Harris, M.D. Brux., of Adam-street, Adelphi, of a daughter.

HAYNES.—On Oct. 27th, at Lansdowne-place, Leamington Spa, the wife of Fredk. H. Haynes, M.D., of a daughter.

HOWELL.—On Oct. 28th, at Cleeve House, West Hill, Wandsworth, the wife of Thos. Arthur Ives Howell, of a son.

HUTCHINSON.—On Oct. 25th, at Haslemere, Surrey, the wife of Roger J. Hutchinson, M.R.C.S., L.R.C.P. Lond., of a daughter (Marjorie).

MAITLAND.—On Oct. 26th, at The Terrace, Haslar, Gosport, the wife of Percy E. Maitland, Surgeon R.N., of a son.

MARRIAGES.

BAKER—YULE.—On Oct. 26th, at Trinity Church, Finchley-road, Hampstead, J. H. Baker, M.B. Durh., of Tavistock-square, W.C., to Florence, second daughter of J. B. Yule, of Netherhall-gardens, Hampstead, N.W.

BOSTOCK—HADEN.—On Oct. 24th, at the parish church, Sidmouth, Robert Ashton Bostock, Surgeon-Captain 2nd Scots Guards, to Caroline Mary, daughter of Mrs. Haden, of Cardigan.

LYTTLE—LEWIS.—On Oct. 23rd, at St. Catherine's Church, Pontypridd, James Shaw Lyttle, M.D., M.Ch., M.A.O. Irel., Cilfynyd, Pontypridd, to Edith Mary, eldest and only surviving daughter of the late Rev. Moses Lewis, Vicar of Llanwonno.

REID—WESTON.—On Oct. 23rd, at St. Mary's, Stafford, Charles Reid, M.B. Aberd., of Stafford, youngest son of the late David Reid, of Aberdeen, to Ada Mary, eldest daughter of Edward Francis Weston, of Stafford.

WEST—DEAR.—On Oct. 23rd, at St. James's Church, Pokesdown, Bournemouth, Richard Milbourne West, M.R.C.S., L.R.C.P., eldest son of H. A. West, of Ryde, Isle of Wight, to Ellen, daughter of F. C. Dear, of Bengoe, Hertford.

DEATHS.

ANDREWS.—On Oct. 29th, at Cheyne-gardens, Launcelot William Andrews, M.D. Lond., eldest son of the Rev. W. R. Andrews, aged 31.

BATESON.—On Oct. 24th, Robert Sander Bateson, Deputy-Surgeon-General I.M.S., of Upna Ghur, Lancaster, in his 64th year.

HUTCHINSON.—On Oct. 26th, at St. Andrew's, Bedford, James Alexander Caldwell Hutchinson, M.D., Surgeon-General, I.M.S. (retired), aged 67.

MACKENZIE.—On Oct. 29th, at Gloucester-terrace, Hyde-park, Inspector-General Sir William Mackenzie, K.C.B., C.S.I., M.D., Honorary Physician to the Queen, late Madras Medical Service, aged 84.

MILLS.—On Oct. 30th, at his residence, 12, Museum-street, Ipswich, William Partridge Mills, M.D., J.P., aged 79 years. No cards. No flowers.

REDFORD.—On Oct. 28th, at Cricklewood, N.W., George Redford, F.R.C.S., aged 79.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.

BOOKS, ETC., RECEIVED.

BAILLIÈRE, TINDALL, AND COX, King William-street, Strand, London.

A Manual of Veterinary Physiology. By Veterinary-Captain F. Smith, F.R.C.V.S. Second Edition. 1895. pp. 573. Price 15s.

Guide to the Medical and Dental Professions. By P. Turner. 1895. pp. 159. Price 3s. 6d.

Pathology and Treatment of Diseases of the Skin. By Dr. Moriz Kaposi. Translation of the last German edition under the super-

vision of Jas. C. Johnston, M.D. Illustrated. 1895. pp. 684. Price 25s.
A Treatise on the Nervous Diseases of Children. By B. Sachs, M.D. 1895. pp. 666. Price 21s.
Relations of Diseases of the Eye to General Diseases. By M. Knies, M.D. Edited by Henry D. Noyes, A.M., M.D. 1895. pp. 467. Price 18s.
Proceedings of the West London Medico-Chirurgical Society. Vol. vi. Sessions 1892-93 and 1893-94. 1895. Price 5s.

BLACK, A. & C., London.
Milk: Its Nature and Composition. By C. M. Aikman, M.A., D.Sc. 1895. pp. 180. Price 3s. 6d.

BLACKIE AND SON, Old Bailey, London, E.C.
Two Gallant Rebels. A story of the great struggle in La Vendée. By Edgar Pickering. Illustrated. 1895. pp. 288. Price 3s. 6d.
His First Kangaroo. An Australian Story for Boys. By Arthur Ferres. Illustrated. 1895. pp. 288. Price 3s. 6d.
A Thane of Wessex. Being a Story of the Great Viking Raids into Somerset. By C. W. Whistler. Illustrated. 1895. pp. 288. Price 3s. 6d.

BRYCE, WILLIAM, Lothian-street, Edinburgh.
The Student's Guide to Practical Therapeutics. By Alex. Wheeler, L.R.C.P. Edin. 1895.

BURROUGHS, WELLCOME, AND CO., Snow-hill Buildings, London; and LIPPINCOTT, J. B., Co., Philadelphia.
The Practice of Pharmacy. A Treatise intended as a Hand-book for Pharmacists and Physicians, and a Textbook for Students. Third Edition. By J. P. Remington, Ph.M., F.C.S. Illustrated. 1895. pp. 1448.

CHURCHILL, J. & A., New Burlington-street, London, W.
Guy's Hospital Reports, Vol. li. Being Vol. xxxvi. of the Third Series. 1895.

CORNISH BROTHERS, Birmingham.
The Ingleby Lectures. 1895.
On Appendicitis and on Perforation of Gastric and Duodenal Ulcer. By G. Barling, M.B., B.S. Lond. 1895. pp. 92.

DOUGLAS, DAVID, Edinburgh.
Moller's Operative Veterinary Surgery. Translated and Edited from the Second Edition of 1894. By John A. W. Dollar, M.R.C.V.S. 1895. pp. 733.

LIVINGSTONE, E. & S., Edinburgh.
Materia Medica Tables. Designed for the use of Students. By A. H. Butcher, L.R.C.P. L.R.C.S.

LONGMANS, GREEN, AND CO., London.
The Life of Sir Henry Halford, Bart., G.C.H., M.D., F.R.S. By Wm. Munk, M.D., F.S.A. 1895. pp. 284. Price 12s. 6d.
A Book for Every Woman. Part I. The Management of Children in Health and out of Health. By Jane H. Walker, M.D. Brux., L.R.C.P., L.R.C.S. Irel. 1895. pp. 267. Price 2s. 6d.

MACMILLAN AND CO., London.
An Atlas of the Fertilization and Karyokinesis of the Ovum. By E. B. Wilson, Ph.D., with the coöperation of E. Leaming, M.D., F.R.P.S. Columbia College. 1895. Price 17s. net.

PENTLAND, YOUNG J., Edinburgh and London.
Tuberculous Disease of Bones and Joints. Its Pathology, Symptoms, and Treatment. By W. Watson Cheyne, M.B. Edin., F.R.S., F.R.C.S. Illustrated. 1895. pp. 374.
The Principles and Practice of Medicine. By William Osler, M.D., F.R.C.P. Second Edition. 1895. pp. 1143.

STEINHEIL, G., Rue Casimir-Delavigne, Paris.
Les Suppurations de l'Apophyse Mastoïde et leur Traitement. Par A. Broca et F. Lubet-Barbon. 1895. pp. 259.

SMITH ELDER AND CO., Waterloo-place, London.
Transactions of the Pathological Society of London. Vol. xlvi. 1895.

SWAN SONNENSCHEIN AND CO., Paternoster-square, London, E.C.
A Woman's Words to Women. By Mary Scharlieb, M.D., B.S. Lond. 1895. pp. 240.

THE DARIEN PRESS, Edinburgh.
Practical Chemistry. By Stevenson Macadam, junr., F.I.C., F.C.S. Second Edition. 1895. pp. 90.

THE ROXBURGHE PRESS, Victoria-street, Westminster.
Furs and Fur Garments. By Richard Davy. pp. 108. Price 3s. 6d.

WEST, NEWMAN, AND CO., Hatton-garden, London.
A Smaller Atlas of Illustrations of Clinical Surgery. By Jonathan Hutchinson, LL.D., F.R.S. Illustrated. 1895.

An Essay on Diphtheria and its Specific Treatment: by John Pirnat, M.D., Evansville, Ind.—The Tests for Colour-Blindness: by F. W. Edridge-Green, M.D., F.R.C.S.; reprint (Baillière, Tindall, and Cox, King William-street, Strand, London), 1895.—Transactions of the Obstetrical Society of London, vol. xxxvii. for the year 1895, Part 3 for June and July (Published by the Society, 20, Hanover-square, W., 1895); price 4s.—Tours in the West Indies (Sir Jos. Causton and Sons, London).—Steam Laundries and Public Health (Sanitary Publishing Company, Fetter-lane, Fleet-street, London); price 6d.—Copies 1, 2, and 3 of the Religious Tract Society's Invalids' Library (The Religious Tract Society, Paternoster-row, London, E.C.).—La Cure Radicale des Hernies Abdominales: par Dr. E. Kummer (Rey et Malavallon, Genève, 1895).—Clinical Notes on Psoriasis: by L. Duncan Bulkley, A.M., M.D.; reprint from Transactions of the Medical Society of the State of New York, 1895.—Magazines, &c., for November: The Strand Magazine, The Picture Magazine, Illustrated English Magazine, Boys' Own Paper, Girls' Own Paper, Leisure Hour, Sunday at Home, Pall Mall Magazine, Westminster Review, Contemporary Review, Chapman's Magazine, Blackwood's Magazine, Friendly Greetings.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Oct. 31st, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Oct. 25	29·53	W.	34	33	72	48	33	...	Hazy
,, 26	29·54	N.	36	35	50	43	33	...	Foggy
,, 27	29·71	W.	38	36	64	45	32	...	Cloudy
,, 28	29·76	S.W.	31	30	64	46	30	...	Foggy
,, 29	29·77	N.	36	35	49	43	31	...	Overcast
,, 30	30·10	N.W.	36	34	65	47	34	...	Hazy
,, 31	29·86	S.W.	47	46	61	51	36	0·01	Overcast

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY.—ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square, W.C.).—8 P.M. President's Inaugural Address. Mr. C. J. Boyd Wallis: (1) Discolouration of Teeth after using Hyd. Perchlor.; (2) Some Remarks on Amalgams.—Mr. J. Main Nicoll: (1) Ptosis of Dental Origin; (2) Fracture of the Maxillary Tuberosity during the Extraction of the Second Molar Tooth. The Discussion on "The Immediate Regulation of Irregular Teeth" will be resumed.
ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

TUESDAY.—PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Papers:—Dr. Snow: The Non-existence of Round-celled Sarcoma as a Distinct Class of New Growth.—Drs. Garrod and Hopkins: On the occurrence of large amounts of Hæmatoporphyrin in the Urine after the administration of Sulphonal.—Mr. Beadles: The Relation of Biliary Calculi to Malignant Disease of the Liver.—Mr. Jackson Clarke: Dermoid Tumour of the Testis.—Mr. Edmunds: Cystic Accessory Thyroid. Card Specimens:—Mr. Beadles: Ureter Obstructed by Calculus.—Dr. Willcocks: Perihepatitis and Thrombosis.—Dr. Walsham: Pulmonary Stenosis.—Mr. Edmunds: Myxoma of Breast.

WEDNESDAY.—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown. Papers:—Prof. G. B. Curatulo (introduced by Dr. Griffith): On the Influence of the Removal of the Ovarian Metabolism in connexion with Osteo-malacia.—Mr. J. Bland Sutton: On a case of Tubo-uterine Pregnancy; Primary Intra-peritoneal Rupture; Recovery.—Dr. A. E. Giles: A case of Uterus Didelphys, with Remarks on the Clinical Importance of this Malformation. Special General Meeting. Confirmation of Revision of Chap. vi. of the Laws.

THURSDAY.—NEUROLOGICAL SOCIETY OF LONDON.—8.30 P.M. A Clinical Demonstration (Drawings and Patients) of the Tropho-neuroses of the Skin, more especially Herpes and Morphœa, at Mr. Jonathan Hutchinson's Museum, 1, Park-crescent.

FRIDAY.—CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Mansell Moullin: Supra-pubic Cystotomy and Prostatectomy in cases of Multiple Calculi.—Mr. Golding Bird: A case of Intussusception through a patent Meckel's Diverticulum.—Mr. Langton: A case of Osteopsathyrosis (Fragilitas Ossium) in which, after firm union of several fractures had taken place, disunion occurred in some several years afterwards.—Dr. Althaus: A case of Brain Tumour successfully healed by Internal Medication.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY.—LONDON POST-GRADUATE COURSE.—London Throat Hospital, Great Portland-street, W., 8 P.M., Dr. Whistler: Syphilis of the Pharynx and Larynx.

TUESDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Craig: Alcoholic Insanity.

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Beevor.
HOSPITAL FOR CONSUMPTION &c. (Brompton).—Mr. R. J. Godlee: Surgical Anatomy of the Chest.
ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—5 P.M. Dr. Morgan Dockrell: Lichen Planus.
WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. Eccles: Cases of Hernia.

THURSDAY.—LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Gt. Ormond-st., 3.30 P.M., Mr. W. A. Lane: Selected Surgical Cases.—National Hospital for the Paralysed, Bloomsbury, 2 P.M., Dr. Bastian: Cases in the Hospital.—Central London Sick Asylum, Cleveland-st., 5.30 P.M., Mr. J. Hutchinson: Cases in the Wards.
FRIDAY.—LONDON POST-GRADUATE COURSE.—King's College, 3 to 5 P.M. Prof. Crookshank: Actinomycosis and Glanders.
SATURDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 11 A.M., Dr. Percy Smith: Insanity with Syphilis.
ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-sq., W.C.).—Dr. Morgan Dockrell: Syphilis.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
We cannot prescribe or recommend practitioners.
Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."
Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*
We cannot undertake to return MSS. not used.

BAREFACED USURPATION.

A CORRESPONDENT has drawn our attention to the following legend, which appears on the letter-paper of a certified masseuse:—

MISS F——, 108, —— Road,
M.B.M.A., LOND., —— Street,
CERTIFIED MASSEUSE. ——.

He says that at first sight he thought that the letter in question emanated from a Bachelor of Medicine and Master of Arts in the University of London. He has since found that the affixed initials to Miss F——'s name are meant to imply that that lady is a Member of the British Massage Association, and he wants to know what we think of such methods. We have no hesitation in saying that to place the initials M.B.M.A. Lond. after a name is to imply that the person in question holds the degrees with which our correspondent credited Miss F——. The fact that there is no gap between the B and the M is a trifle that might escape anyone's notice (how often do we see M.B., C.M. printed without proper spacing?) and the addition of the word "Lond." seems specially designed to carry out the imposture. We consider that the heading to this letter-paper constitutes, as we have termed it, a barefaced usurpation by a masseuse of the style and title of a graduate in Arts and Medicine of London University.

Mr. Charles Blair.—The best account of the Burmese hairy family is to be found in Yule's "Mission to the Court of Ava" (Smith, Elder, and Co., London, 1858), pp. 93, 94, 95, where a portrait will be found Some of the descendants of this family were, we believe, living at the court of King Theebaw at the time of our recent annexation of Upper Burmah.

Cardifian.—The volumes have no pecuniary value worth mentioning.

"WHAT IS LIFE?"

To the Editors of THE LANCET.

SIRS,—I can heartily sympathise with your correspondent, "Only a Medico," who asks the above question after having perused various writings on the subject in THE LANCET. That of Dr. Lionel Beale is of great interest, but I do not quite follow him in one particular. He says that life is not the product of any physical change, but is an independent principle, or a distinct "guiding and directing agency." Now, in the analogous case of the mind there are also the two similar theories—the one that mind is an emanation from the brain; the other that it is an independent principle, remaining when the body decays and becoming an immortal spirit. In like manner, as regards the vital principle, or "vitality," I ask, What becomes of it when a vegetable or animal is burned or otherwise destroyed? I should like the lecturer's clear opinion or belief in this matter—demonstration he cannot give—so that I may more fully seize the thread of his argument.

I am, Sirs, your obedient servant,
Oct. 27th, 1895. ENQUIRER.

FEES.

To the Editors of THE LANCET.

SIRS,—In October, 1894, I attended a woman in her confinement (who had engaged me for a fee of one guinea). After the child was born I found she had adherent placenta. This I endeavoured to remove, but during removal I found she was in a collapsed condition. Having brought her round, after a time I operated, removing part but not all. She then collapsed again. I informed the nurse that the case was serious, and told her that I should call in another practitioner. I saw the husband, and sent him for another medical man, upon whose arrival we administered chloroform and removed the placenta. After three weeks' attendance the patient recovered I sent my account in with an additional charge of half-a-guinea—the fee I paid the other practitioner for his attendance. The husband refusing to pay, I reluctantly summoned him for the debt. The county court judge at the hearing allowed the guinea fee, but disallowed the half-guinea paid under the circumstances mentioned above.

If this is a correct decision, what are we to do in such circumstances with a serious case? Are we to call in another practitioner, pay his fee, and bear the loss ourselves; or are we to leave the patient without further advice? The net result to me has been that after attending the case before, during, and after confinement I receive a guinea, out of which I have to pay my colleague 10*s.* 6*d.*, leaving me with the same amount as a reward for my anxiety and trouble.

I am, Sirs, yours faithfully,
Oct. 24th, 1895. T.

*** In our opinion the hardship of these cases, which are constantly occurring, might be avoided, if the medical man, when undertaking to attend a midwifery case for, say, a guinea, made it clear that for that fee he would only attend for the confinement and ten days after, and that it would not include attendance beyond that time, if it should prove necessary, or the services of another medical man if the case should be one requiring another practitioner on account of some complication. In this actual case when the medical man saw the husband and obtained his sanction to call in another practitioner he should have explained that the latter would have to be paid separately. At the same time we sympathise with our correspondent, who has had shabby treatment meted out to him.—ED. L.

M.D., in writing of the Dentists Act, attributes grossly unprofessional conduct to a brother practitioner. He will understand that we cannot print his letter without knowing to whom he is referring, and that even then a question would arise as to the utility of the publication.

M.D.—Technically, the School Board never demands a certificate. It is only the magistrate who does so. If "M.D." is unwilling to give a certificate he had better refer the parents to the parish doctor.

Mr. J. Allison Smith.—There is no such fund at our disposal or elsewhere. Particulars concerning THE LANCET Relief Fund can be obtained from Mr. E. Davis, THE LANCET Office.

Dr. White is advised to do nothing.

"WANTED, AN EXPLANATION OR A SUGGESTION."

To the Editors of THE LANCET.

SIRS,—I should suggest the probability of the case described in THE LANCET of last week being one of so-called "scar keloid," which sometimes follows variola pustules, syphilides that have destroyed the skin, and the scars of burns. I have known of a similar case in a child six years of age, where two firm, freely movable pink masses with well-defined projections made their appearance in the cicatrices shortly after vaccination. They were about an inch long and three-quarters of an inch wide, and gave rise to no subjective symptoms. The family history was good; but there seemed to be a predisposition on the part of the skin to such formations, as a similar mass developed in the same case after the healing of an incised wound on the leg. The case was successfully treated by electrolysis, a stout needle being used and multiple punctures made in all directions and in the tissues for a space about the growths. I am, Sirs, yours truly,
Halifax, Oct. 26th, 1895. H. LAWRANCE GILL, M.D.

"THE BIRMINGHAM LUNACY PROSECUTION."

To the Editors of THE LANCET.

SIRS,—I beg to correct the impression in THE LANCET of Oct. 26th. The number of hours was *six*, not sixteen.—Yours truly,
Birmingham, Oct. 30th, 1895. F. R. EVANS.

During the week marked copies of the following newspapers have been received:—*Huddersfield Chronicle, Midland Times, Manchester Guardian, Straits Budget (Singapore), Liverpool Echo, Dover Express, Dudley Herald, South Wales News, Suffolk Chronicle, North Wales Chronicle, Leicester Daily Mercury, Sussex Daily News, Hastings Times, Birmingham Chronicle, Guardian, Sheffield Independent, Hinckley Times, Medical Record (New York), Totnes Times, Glasgow Herald, Dublin Evening Telegraph, Western Mercury, Nottingham Daily Express, Bradford Observer, Cork Constitution, Brighton Gazette, Scotsman, Caterer, Leeds Mercury, Builder, Portsmouth Times, Citizen, Architect, Yorkshire Post, Cyclist, Bristol Mercury, Sanitary Record, Perthshire Advertiser, Family Doctor, St. Mary's Hospital Gazette, Technical World, Pioneer Mail, Guy's Hospital Gazette, Midland Sun, Australasian Medical Gazette, Grays Standard, Islington Gazette, Anglo-Celt (Cavan), Evening Chronicle (Newcastle), Birmingham Daily Post, &c., &c.*

Communications, Letters, &c. have been received from—

A.—Dr. J. H. Abram, Liverpool; Mr. P. J. Atkey, Putney; Mr. W. J. Attygalle, Aberdeen; Æsculap Bitter Water Co., Lond.; Arema Manufacturing Co., Lond.; Argos, Lond.; A. Z., Brighton.

B.—Dr. J. Banks, Aberdare; Dr. L. Backus, Chatham, Ontario; Mr. T. B. Browne, Lond.; Mr. C. Birchall, Liverpool; Mr. L. Browne, Lond.; Messrs. Bostel, Lond.; Messrs. Bates, Hendy, and Co., Reading; Messrs. Burgoyne, Burbidges, & Co., Lond.; *Bristol Med.-Chir. Journ.*, Editor of; B., Lond.

C.—Dr. J. Cagney, Lond.; Dr. J. G. S. Coghill, Ventnor; Dr. R. H. Collins, Tow Law; Major S. Churchill, Lichfield; Mr. J. Cotman, The Minories; Mr. W. J. Collins, Lond.; Mr. R. P. Charles, Neath; Mr. D. F. B. Cotes, Burton-on-Trent; Mr. J. J. Clarke, Lond.; Messrs. C. J. Clay and Sons, Lond.; Messrs. J. Cleave and Son, Crediton; Messrs. Cornish Bros., Birmingham; Central Lond. Throat and Ear Hosp., Sec. of; County Asylum, Dorchester, Sec. of; Corinne, Lond.; County, Lond.

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K.—Dr. O. J. Kauffmann, Birmingham; Dr. H. R. Kenwood, Lond.; Mr. J. Kirkland, Edin.; Kent, Lond.

L.—Dr. V. Lenobel, Vienna; Dr. H. G. Lys, Bournemouth; Mr. W. Lambert, Malvern; Messrs. Lazarus and Davidson, Lond.; Messrs. E. and S. Livingstone, Edin.; Lewisham Union Infirmary, Med. Supt. of; London County Council, Blackwall.

M.—Dr. A. E. Morison, Hartlepool; Dr. H. B. Melville, Nowgong; Dr. Macdougall, North Berwick; Mr. W. Macalpine, Lond.; Mr. P. B. Mason, Burton-on-Trent; Mr. J. W. Moore, Lond.; Mr. W. B. Moore, Stourbridge; Mr. H. Marsh, Lond.; Rev. R. D. Maxwell, Teignmouth; Mr. R. Mosse, Lond.; Messrs. Merryweather and Sons, Lond.; Messrs. Macmillan & Co., Lond.; Matrons' Council, Lond., Hon. Sec. of; *Morningside Mirror*, Editor of; M.B., London; M.D., London.

N.—Mr. F. Napier, Glasg.; Nurses' Cooperation, Lond.; National Hosp. for Diseases of the Heart, Lond., Sec. of.

O.—Dr. Thomas Oliver, Newcastle-on-Tyne; Messrs. Oliver & Boyd, Edin.; Messrs. Orridge and Co., Lond.; Messrs. Oldfield, Pattinson, and Co., Manchester; Obstetrical Soc. of Lond., Sec. of.

P.—Mr. O. F. Paget, Lond.; Mr. Y. J. Pentland, Edin.; Pitman's School of Shorthand, Lond., Sec. of; Messrs. Parkins and Gotto, Lond.; Patent Wire Wove Co., Lond.; Progress, Lond.; Principal, Croydon.

R.—Dr. J. Ramage, Lond.; Mr. L. Roberts, Liverpool; Mr. J. W. Rich, Iowa City, U.S.A.; Mr. T. Richards, Lond.; Señores Romo y Füssel, Madrid; Messrs. J. Richardson and Co., Leicester; Messrs. Robinson and Co., Norwich; Royal Portsmouth Hosp., Sec. of; Royal Hosp. for Diseases of the Chest, Lond., Dean of; R., Croydon.

S.—Sir James Sawyer, Bham.; Dr. R. E. Shettle, Reading; Dr. F. H. Smith, Lewisham; Dr. M. F. Simon, Singapore; Dr. W. A. Smith, South Shields; Mr. H. E. Steel, Liverpool; Mr. G. B. Smith, Lond.; Mr. H. Simpson, Frodsham; Mr. J. D. Staple, Bristol; Mr. W. B. Saunders, Philadelphia; Mr. J. B. Sutton, Lond.; Mr. P. F. Sturridge, Kendal; Mr. A. Stenhouse, Glasg.; Messrs. G. Street and Co., Lond.; Messrs. Stubbs, Lond.; Sanitary Wood Wool Co., Lond.; *Science Progress*, Lond., Editor of; Sister, Ramsgate.

T.—Mr. J. W. Taylor, Birmingham; Mr. B. Thornton, Margate; Mr. R. G. Turner, Quetta, Beloochistan; Messrs. Terrell and Co., Lond.; Toxteth Park Workhouse, Clerk to the Guardians of.

V.—Veritas, Lond.

W.—Dr. S. Wilks, Lond.; Dr. J. K. Watson, Heckmondwike; Dr. W. H. Williams, Stacksteads; Dr. J. D. Williams, Cardiff; Dr. Wright, Matlock; Mr. S. White, Sheffield; Mr. W. F. Webster, Studley; Mr. J. Wright, Paul; Mr. E. Wilson, Exeter; Mr. E. H. Worth, South Norwood; Mr. J. W. Vickers, Lond.; Mr. H. S. Walker, Leeds; Messrs. Wilcox and Co., Lond.; Westminster Hosp. Medical School, Sec. of.

Y.—Dr. J. Young, Annan.

Letters, each with enclosure, are also acknowledged from—

A.—Dr. W. D. Arnison, Newcastle-on-Tyne; Mr. R. R. Anderson, Carmarthen; Mr. K. Adamson, Accrington; Angle-Swiss Condensed Milk Co., Lond.; Aston Union, Clerk of; A. P. W., Lond.; Alpha, Lond.; Ajax, Lond.; A., Alsager; Assistant, Lond.

B.—Dr. J. Berry, Lond.; Dr. J. W. Bone, Burnley; Mr. G. A. Bruce, Aberdeen; Mr. H. R. H. Bigg, Lond.; Mr. W. M. Beaumont, Bath; Mr. Brown, Lond.; Mr. J. S. Buck, Eaton Socon; Mr. C. Bridges, Lond.; Mrs. S. A. Bennett, Lond.; Messrs. Blackie and Son, Lond.; Messrs. Bell and Bradfute, Edin.; Messrs. Brown, Gould, and Co., Lond.; Messrs. Blondeau et Cie., Lond.; Messrs. Bentley and Son, Lond.; Messrs. Bonthron and Co., Lond.; Barnwood House Hosp., Sec. of; British Castor Co., Lond.; Barham, Lond.; B. M., Lond.

C.—Dr. Collier, Bulwell; Dr. E. H. Cooke, Bhusawal, India; Dr. E. Du Cane, Lond.; Mr. H. Cox, Stratford-on-Avon; Mr. A. R. Couzens, Westbury; Mr. W. Colquhoun, Bowling; Mr. D. J. Carroll, Moorstown, Clonmel; Messrs. W. & R. Chambers, Edin.; Messrs. Curtis and Co., Lond.; Messrs. Cheers & Hopley, Chester; C. H., Birmingham; C. C., Liverpool; Century, Lond.; Congo, Lond.; Confidence, Lond.

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F.—Mr. J. A. Forrest, Woodham Ferris; F. H., Lond.; Fidelity, Lond.; Freda, Lond.; F., Lond.

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J.—Justice, Lond.; J. W., Lond.

K.—Mr. T. S. Keys, Mumbles; Mr. W. R. Kingdon, Lond.; Mr. B. C. Kendall, Helston.

L.—Mr. A. J. Lappin, Gilford, co. Down; Mr. A. Leckie, Lond.; Messrs. Lee and Nightingale, Liverpool; Messrs. Lyde and Roper, Lond.; Leicester, Borough of, Accountant of; Levis, Lond.; Locum, Leicester.

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